

THE MILLING WORLD

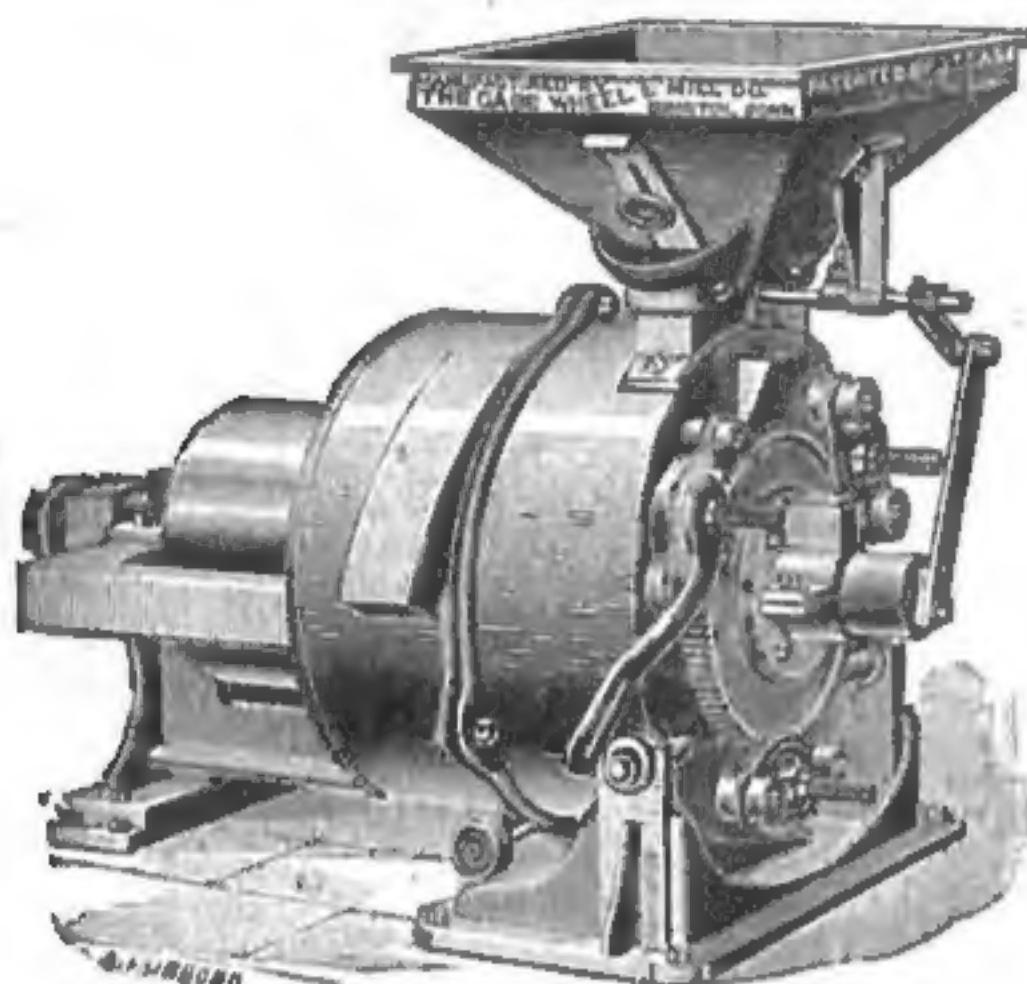
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XX. No. 21.

BUFFALO, N. Y., JULY 22, 1889.

\$1.50 PER YEAR.



VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS. (J. T. CASE'S PATENT.)

FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & CO., Meriden, Conn.

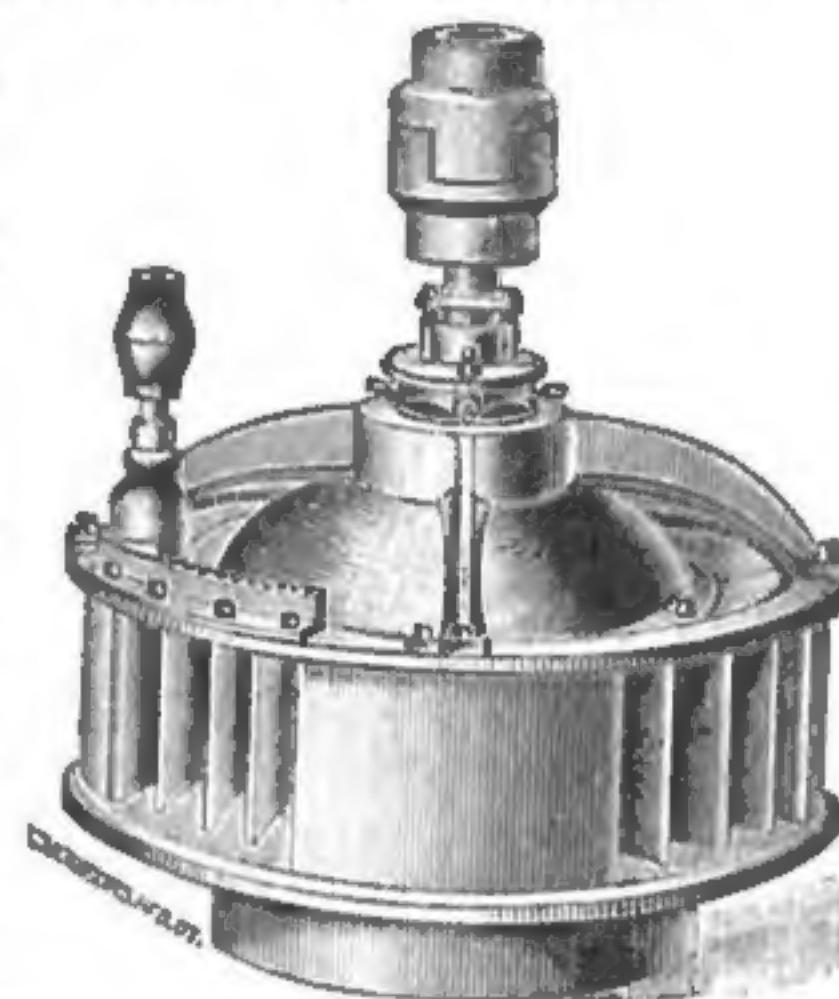
"Superior to any mill in use."—GEO. WESTON, Bristol, Conn.

"The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.

"We take pleasure in recommending it."—GARLAND, LINCOLN & CO., Worcester, Mass.

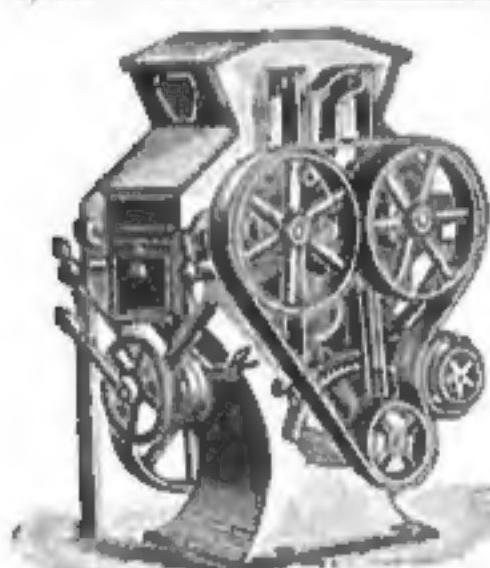
SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

The Improved National Turbine Water Wheel



The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.

The Case Wheel & Mill Co., Bristol, Conn.



Wheat Roller Mill.

BECAUSE the adjustable roll is not pushed against its mate but is held rigidly to it, which takes out all vibration.

BECAUSE it does 25 per cent. more work than any other roll.

BECAUSE the heated air is taken out of the machine.

BECAUSE it has the best feeder.

BECAUSE it has no tremor.

BECAUSE it has the effect of a roll without springs.

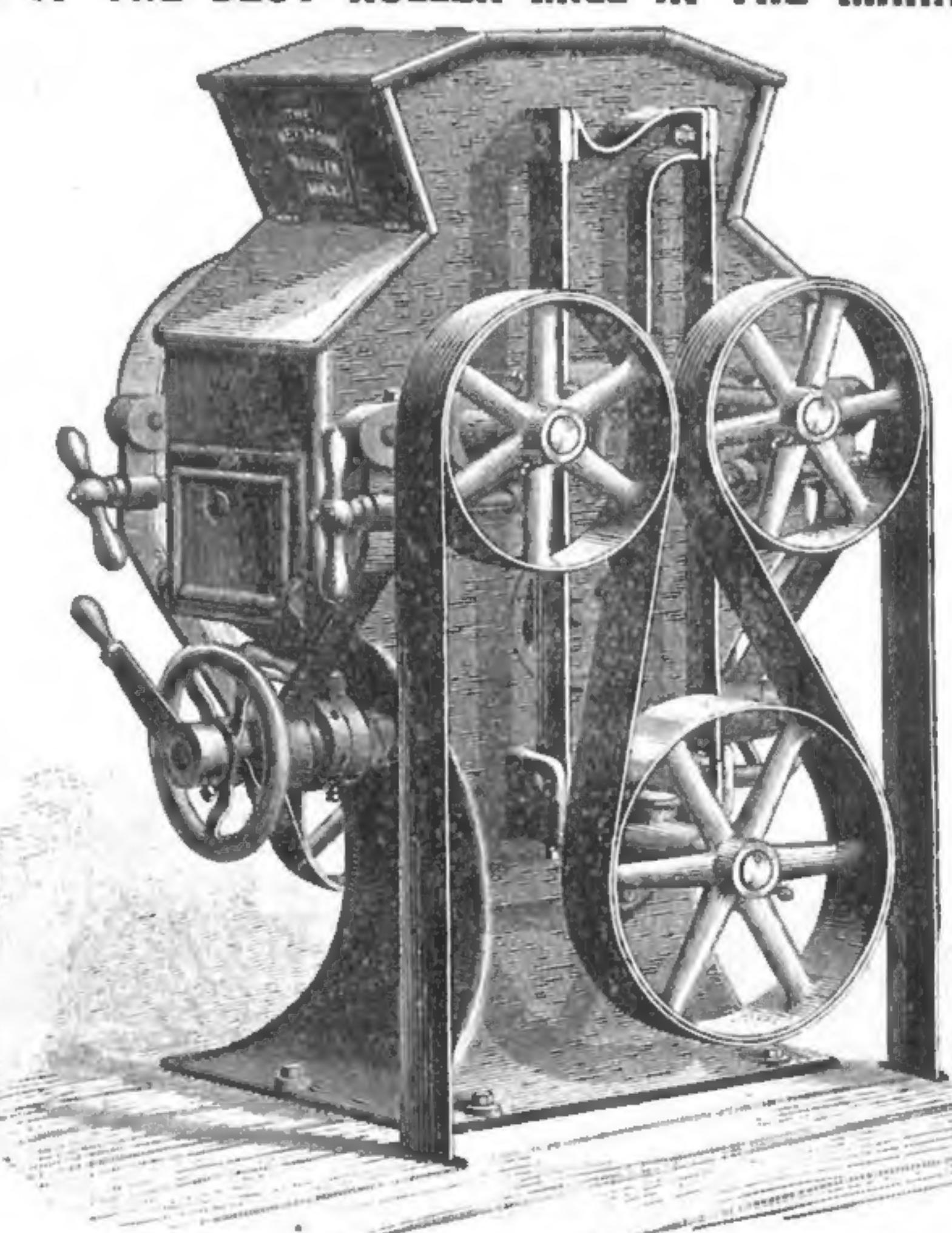
BECAUSE it can be trammed in a quarter of a minute.

BECAUSE you can tram either end of the four rolls.

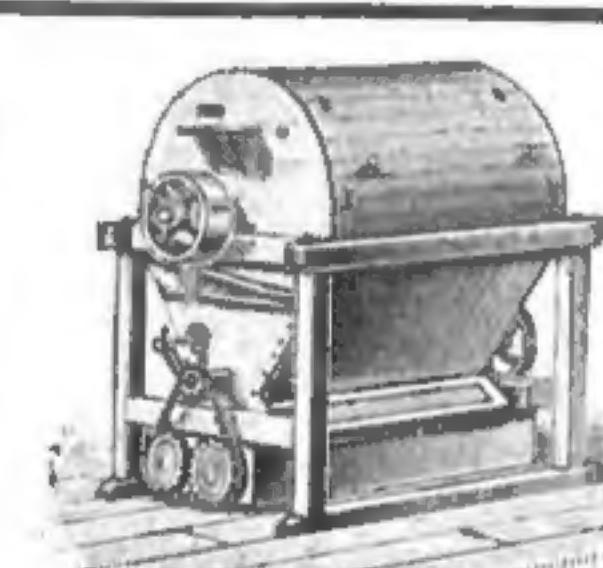
Also ask for prices on the only Noiseless Sieve Scalper, the "Allfree" Improved Purifier, "Climax" Bran Dusters, and "Allfree" Flour Packer.

THE "KEYSTONE"

WHY IS IT THE BEST ROLLER MILL IN THE MARKET?



THE KEYSTONE FOUR ROLLER MILL.



Bran Duster.

BECAUSE it runs 25 per cent. lighter than any other roll.

BECAUSE all bearings are universal and never get out of line.

BECAUSE you can throw the rolls apart from either side.

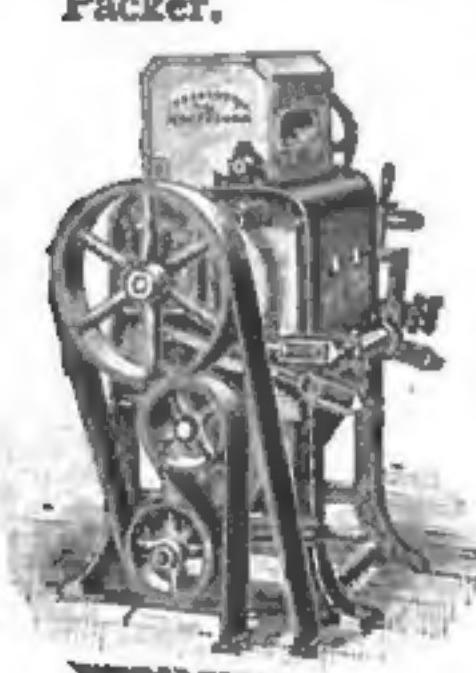
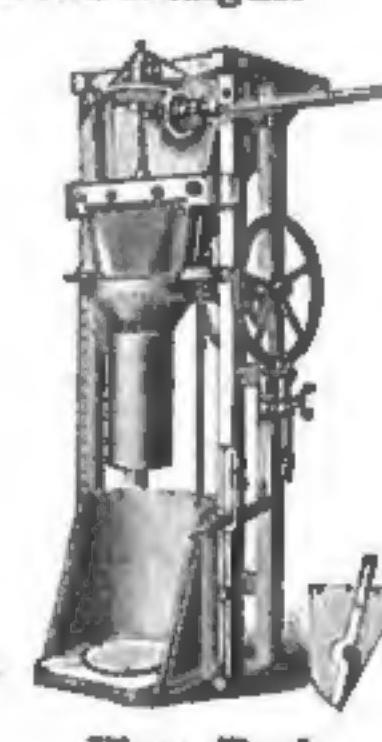
BECAUSE you can set both ends of the roll at the same time with one movement.

BECAUSE only one spring is used for both ends of rolls.

BECAUSE there is no slip to the differential.

BECAUSE no dust escapes from machine, all openings being covered.

Also ask for prices on "Allfree" Centrifugal Reels, "Success" Bolter, Three Reduction Corn Mills, Latest Improved Designs.



Flour Pack

Complete Outfits for Flour or Corn Meal Mills of any Capacity.

THE J. B. ALLFREE CO., INDIANAPOLIS, IND.

108 & 105 South Pennsylvania Street.

Corn Mill.

FIRE! FIRE!! FIRE!!!

Our entire works were destroyed by fire on the night of May 10th. Scarcely two hours after the workmen had left their day's work a fierce fire started which in less than two hours left our entire plant as complete a wreck as was ever witnessed. But like the

FABLED PHŒNIX OF MYTHOLOGY

We have risen from our own ashes, and have erected a temporary machine shop above the ruins, and have it already furnished with power and new machinery for Re-Grinding and Re-Corrugating Rolls, together with Lathes and other machinery for doing general machine work. We have leased some Large Railroad Shops and an Extensive Wood-Working Factory, so that we are now building Case Roller Mills, Purifiers, Inter-Elevator Flour Dressers and all our other machinery nearly as fast as ever.

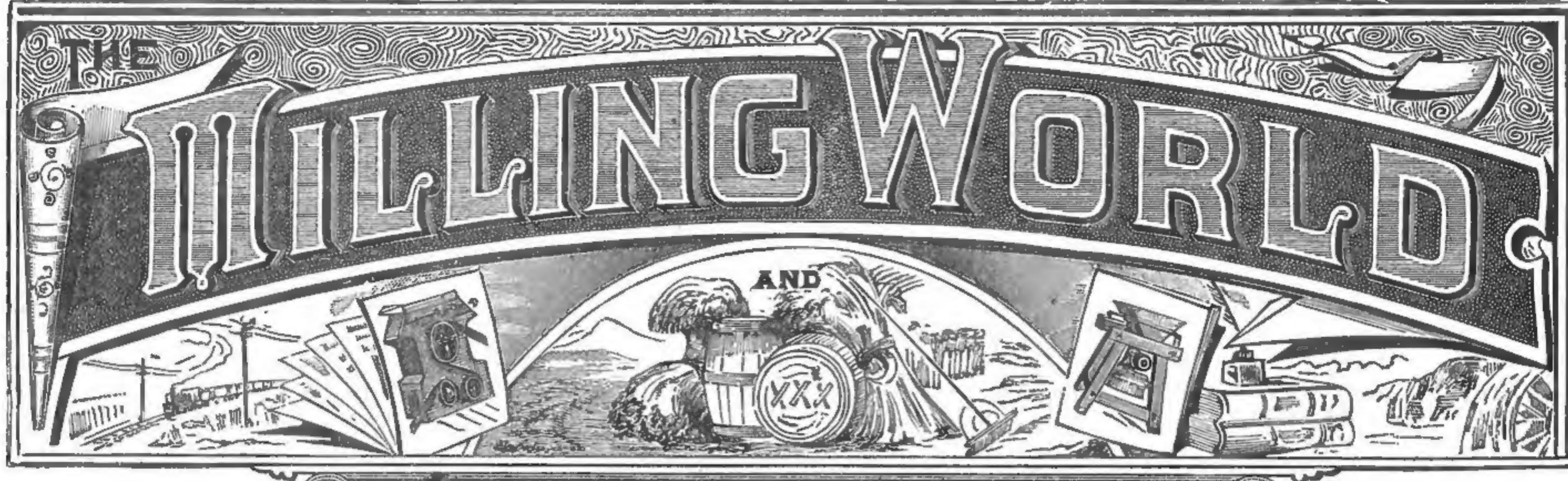
OUR PATTERNS WERE SAVED

Also all our Plans, Flow Sheets, and the Records of our Business.

NEW AND EXTENSIVE WORKS

Will be erected at once on a large building site just purchased, and we intend to make our shops when completed the most convenient and best equipped plant in the country. We expect soon to get caught up with our orders, and will be in shape to contract for new work at an early date. We hereby tender our sincere thanks to our many friends for their letters of sympathy and good will, and also to those who have been patiently waiting for their machines until we could get in shape to make them. We assure all our friends that we shall still be in the field with Case machinery, and will be glad to answer all inquiries the same as ever, for we are still doing business at the old stand.

THE CASE MFG. CO., COLUMBUS, O.



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LATE reports indicate a famine crop of wheat in India, a disastrous failure in Russian and Austro-Hungarian wheat crops, and the practical wiping out of the Dakota wheat crop by drouth. The situation looks bullish.

THERE is at this time nearly enough wheat safely harvested in the United States to supply the home consumption for the coming year. The balance of the crop is interesting mainly because it will settle the export question for the year and determine prices both at home and abroad.

THERE is money in milling journalism, despite the fact that one or two milling journals will persist in saying that there are too many milling journals already in the field. We hear vague rumors of several new journals that may be launched in the near future, and we repeat that there is room for more, and that there is money in the business.

MINNEAPOLIS millionaire millers are reported to have had a decidedly hard time during the last year, and one of the most prominent of them has withdrawn from the flour-making business altogether. Minneapolis millers have been the envy of the millers the world over. We hope they will not be forced to follow their unlucky associate out of the business. They have tried to dictate to the world, and it is barely possible that they may have bitten off more than they could chew. Last year they "bulled" their own raw material, the spring wheat which they grind, and they seem to have made a mistake in their bulling. Of course Minneapolis millers do not have to learn any thing. They know it all, consequently they will soon be on their feet again. With their awful home organ always ready to pump wisdom and wind into them, they need not fear the future.

RECENT rumors about the investment of British syndicate money in American flouring-mills appear to have been well founded, so far as Minneapolis is concerned. It is announced that British investors are trying to obtain control of some of the great mills in that town, and that they are likely to succeed. The other towns mentioned were Buffalo, St. Louis and Rochester, but in none of those places have the British buyers been able to make progress towards purchasing. Doubtless in every case they will pay a round sum for the milling plants they buy. It is stated that the British money recently invested in American breweries amounts to nearly \$35,000,000 for eleven plants. Probably the investments in flouring establishments will be even more liberal after a break is made. British money in these days is finding little or no profit in home investments or in foreign railroad investments, and it will seek every channel that seems to promise a larger and more reliable income.

DURING the past year the milling fraternity has heard a great deal about a certain German epoch-making milling-revolution machine, the Haggemacher "plansichter," which was confidently declared by European experts to be the greatest flour-dressing machine of the age. It now transpires that, instead of being really the greatest machine in

its line, it must "play second-fiddle" to American machines. Recently in trials at Louvain, Belgium, the "plansichter" was brought into direct competitive trial with the Geo. T. Smith Middlings Purifier Company's Inter-Elevator and Centrifugal Reel, and the German machine was vanquished by the American machine. The trials were made carefully and scientifically, by disinterested persons, and, despite the fact that the Smith machines were at a slight disadvantage because the buhrs employed to grind the middlings were not of sufficient capacity to keep them properly loaded, the official report shows that the Smith machines were able to produce over 7 per cent more of flour than the "plansichter" could produce, from the same weight and kind of stock. The flour produced on the American machine was much better in color than that produced on the German machine, and the Smith cut-offs were cleaner and dusted better than the "plansichter" cut-offs. Had the Smith machine been properly loaded throughout the trials, so as to test its capacity fully, the showing would have been still more favorable to it, but as it is, the American machine still stands at the head, notwithstanding the great claims that have been made for its new German competitor.

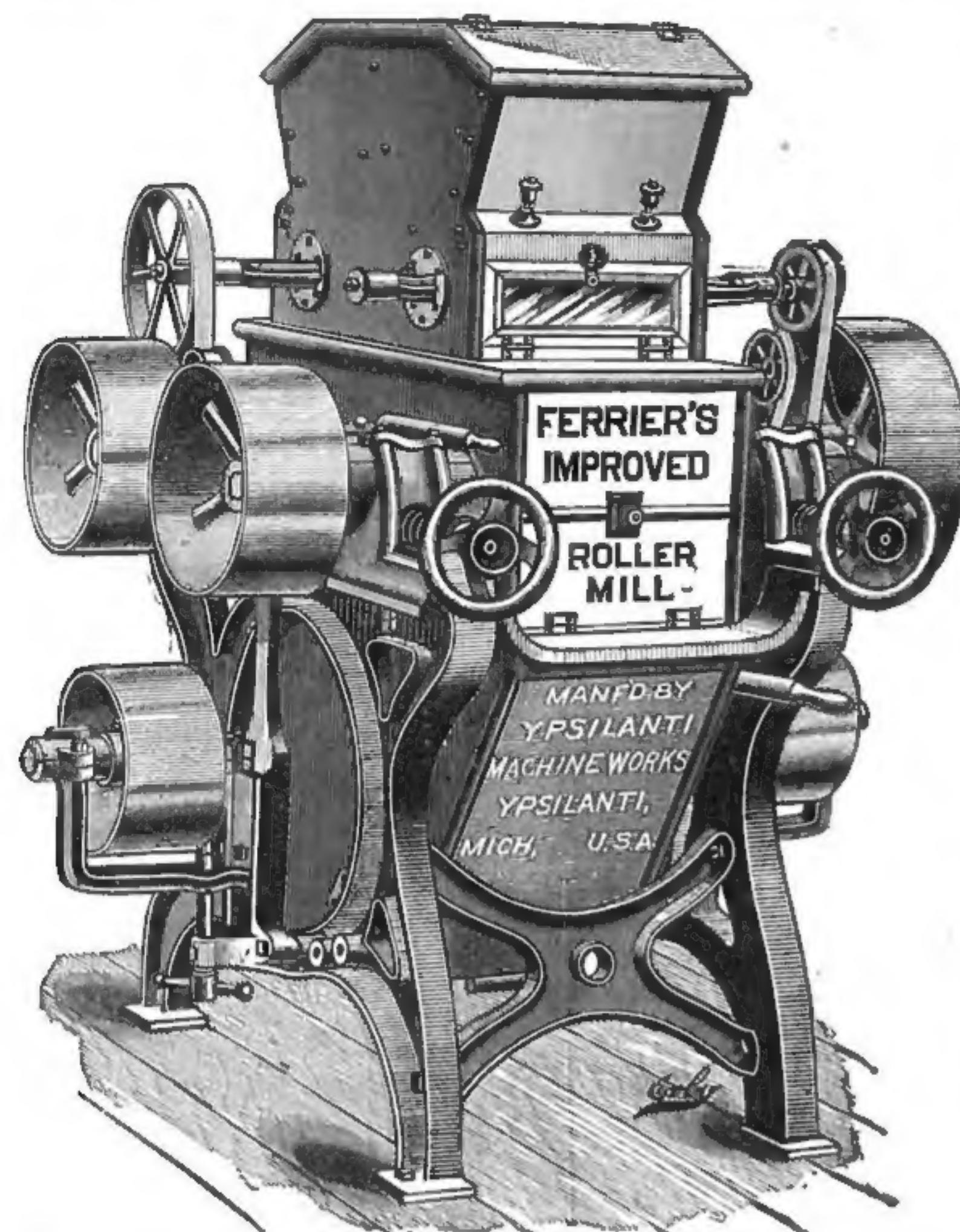
AT THE recent convention of Canadian millers in Toronto the question of the cause of the depression in Canadian milling was freely discussed. Here are some of the influences that were stated to be strong in causing depression: 1. Canada has about 2,300 mills, over half roller mills, capable of grinding 18,000,000 barrels of flour a year, while the Dominion consumes only 5,000,000 barrels a year. 2. Over-competition among millers. 3. Millers have paid too much for wheat and got too little for flour. 4. Lack of export trade. 5. Shortage of the Canadian wheat crop in 1888, forcing Canadian millers to import American grain, subjecting them to the evil effect of the disproportionate duties on wheat grain and wheat flour, and giving practically a bonus of \$50,000 to \$75,000 to the American millers to ship flour into Canada. 6. Political conditions which make it dangerous or inexpedient for the party in power to raise the duty on wheat flour or to lower the duty on wheat grain. 7. A lack of organization, a want of confidence among millers, and dubious manipulation of market quotations in Toronto. The convention was curiously split on questions of free trade and protection, and also on the question of the attitude which the millers ought, as a body, to assume towards the present government. The millers set forth their grievances strongly and clearly, but the reports of the meeting do not indicate that any feasible method of securing redress was adopted or even suggested. With the prospect of less than an average crop in Manitoba again this year, and with the certainty of abundant crops in the United States, thus forcing them to import grain and threatening large surpluses of American flour to flood their markets next fall and winter, certainly the millers of Canada may be excused for suggesting that they pack their flour in blue barrels in case the government refuses to equalize the duties on grain and flour imported. Blue seems to be an appropriate color for things Canadian this year.

YPSILANTI MACHINE WORKS, YPSILANTI, MICH.

MILL BUILDERS

And Manufacturers of

FLOUR MILL MACHINERY



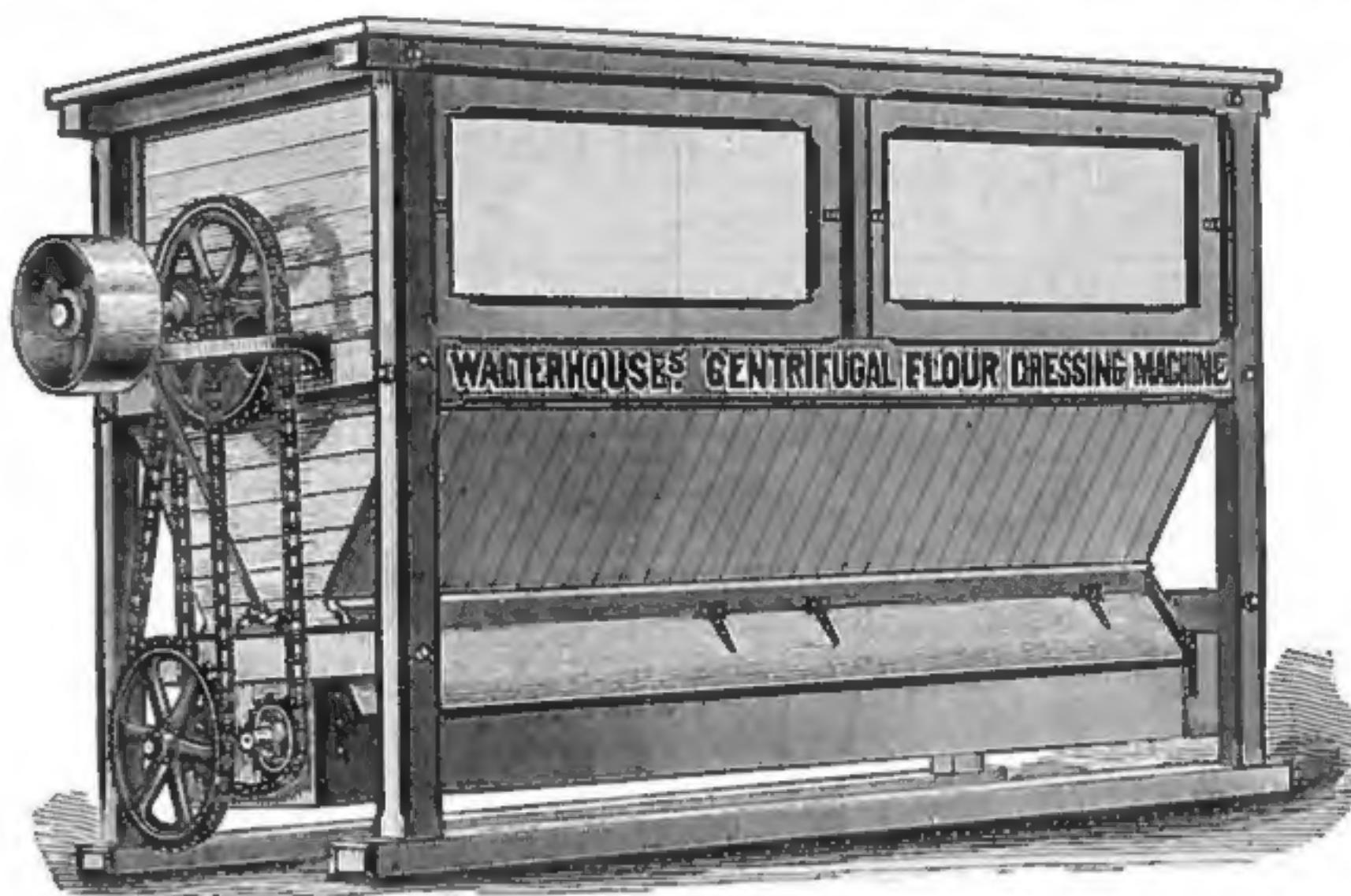
Sizes of Ferrier's Improved Four-
Roller Mills.

NASHVILLE, TENN., MAY 8, 1889.

YPSILANTI MACHINE WORKS, YPSILANTI, MICH.

Gentlemen: We have had a line of your "Roller Mills" in use for over two years, and they have given entire satisfaction in every respect. They work like a charm, and their ease of adjustment and solid structure, together with the excellent finish you give them, can but recommend your machines to the milling public.

Yours respectfully, A. R. DICKINSON & CO.



**JOHN ORFF, PROPRIETOR OF
EMPIRE FLOURING MILLS.
FORT WAYNE, IND., APRIL 10, 1889.**

YPSILANTI MACHINE WORKS, YPSILANTI, MICH.

Gentlemen: The Centrifugal Reel bought from you some time ago is doing its work complete in every respect. It does a large amount of work, and does it well. Should we make further changes in bolting, shall use more of them. Wishing you success, we remain,

Respectfully, JOHN ORFF.

JOHN ORFF.

To Vastu Anil Machine Works

**OFFICE OF LEXINGTON MILL CO.,
LEXINGTON, MASS.—JAN. 22, 1880.**

To YPSILANTI MACHINE WORKS. LEXINGTON, MICH., JAN. 22, 1889.

Gents: In reply to yours of June 5th, would say that we are well pleased with our mill. It has more than met our expectations. Although it was feared that the six-inch rolls would not prove a success, we find them to be complete in every respect. We are making as fine a flour as there is made in the state, and we guarantee our patent to be equal to Minnesota Patent. The mill has given us no trouble whatever since we started it, and for plan and workmanship, your Mr. G. Walterhouse deserves great credit. If your friends doubt it would be pleased to have them come and see for themselves.

Yours respectfully,

LEXINGTON MILL CO.

Your respectfully LEXINGTON MILL CO.

Dawson's Roller Mill

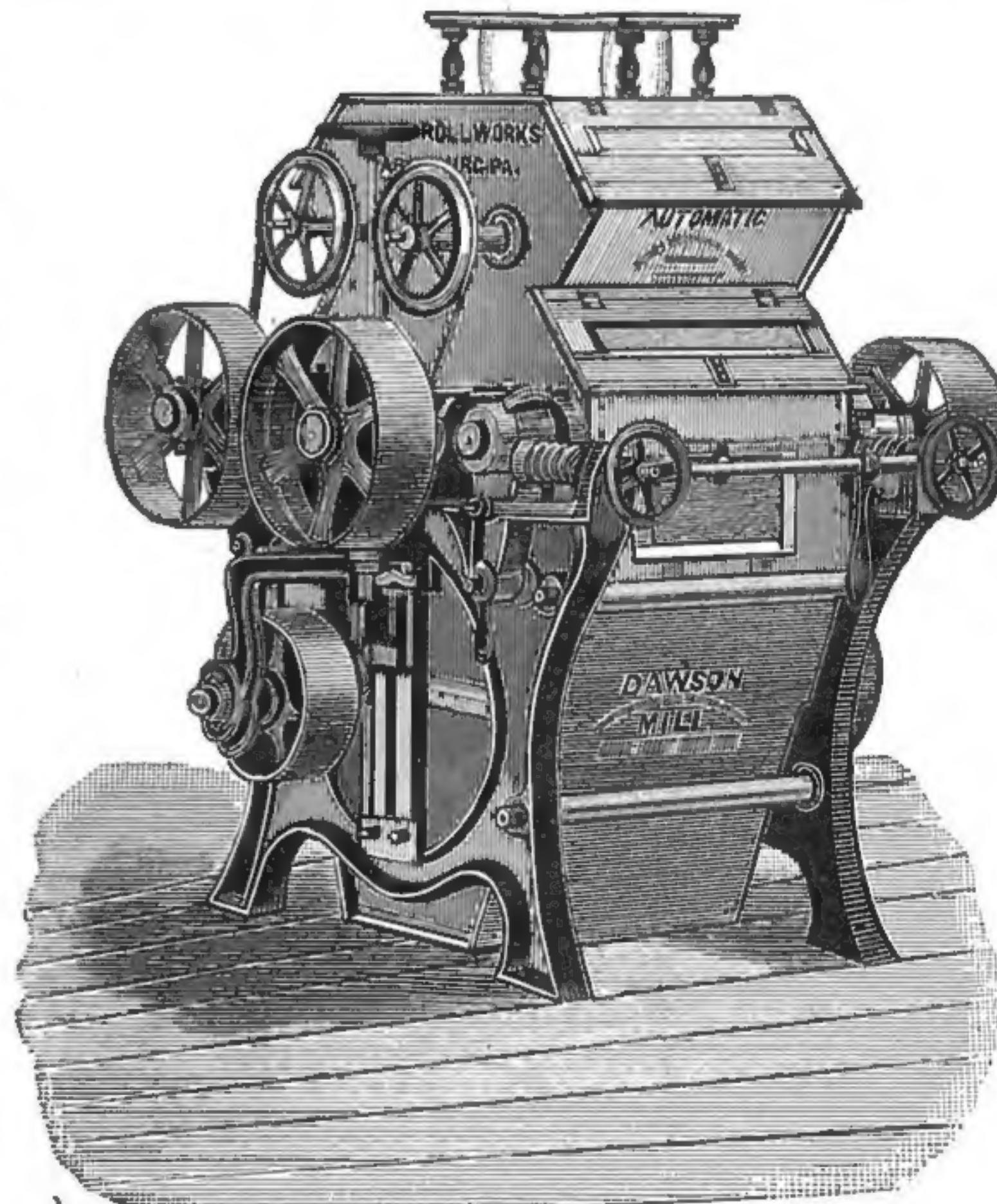
Is acknowledged to be the very best in the market. It has our Patent Automatic Centrifugal feeder, never failing to feed the stock the full length of rolls in an even sheet. It is the Latest and Best feed out, uses less power and is simple in construction. It can be placed on any style of machine with little expense. We use for roll bearings phosphor-bronze metal which will admit rolls being run at any speed without heating and with little friction, and uses little oil. We use the Dawson Corrugation, which is admitted the best in long or short system mills as the action is granulating rather than CUTTING.

We have a large plant to Re-grind and Re-Corrugate Rolls.

Owing to our late increased facilities and central location we are enabled to ship goods promptly on the shortest notice.

PARTIES CONTEMPLATING REMODELING THEIR MILLS OR
BUYING ANY ROLLER MACHINES ARE REQUESTED TO PUT
THEMSELVES IN CORRESPONDENCE WITH US.

FOR PRICE LISTS AND CIRCULARS, ADDRESS,



Dawson Roll Works, Harrisburg, Pa.

MILLING WORLD
AND
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY. OFFICES: Corner Pearl and Seneca Streets,
Over Bank of Attica.
MCFAUL & NOLAN, - - - PROPRIETORS,
THOMAS MC FAUL. JAMES NOLAN.

SUBSCRIPTION.

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.

To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.

Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

ADVERTISING.

Rates for ordinary advertising made known on application.

Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character. One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.

Orders for new advertisements should reach this office on Friday morning to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.

This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.

Address all communications

THE MILLING WORLD,
BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

SITUATIONS WANTED.

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

WANTED.

A situation as first or second miller. Married. Rolls or stone. Well up in rolls. Good stone dresser. "MILLER," 1846 Niagara street, Buffalo, N. Y. 19

WANTED.

A situation with parties who appreciate good work, with rolls or buhrs, on patents. Have the following recommendation from Miller Bros., Forest Grove, Ore., dated Nov. 10, 1887: "To whom it may concern: This is to certify that Peter Provost has been in our employ as head miller, and has given entire satisfaction. We believe him to be a very competent man, and cheerfully recommend him to the milling public." State wages you wish to pay. Address, PETER PROVOST, Menominee, Mich. 21

SPECIAL ADVERTISEMENTS.

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office, 10 cents must be added to pay postage.

WANTED.

A miller with some capital to help stock with, to take charge and run my mill. Address LOCK BOX 265, Clearfield, Clearfield county, Pa. 1720

FOR SALE.

Several good second-hand and new turbines of various styles. Second-hand price list and descriptive matter and prices of our new machines sent free. Every one interested in the shortest route to successful milling on rolls or in grinding corn and feed with the least expense of power, should address us before buying.

8tf

FLENNIKEN TURBINE CO.,
Dubuque, Iowa.

MILL MACHINERY FOR SALE.

One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
One 20-Inch Under-Runner Portable Mill, French Buhr Stone, capacity 10 to 12 bushels per hour; new, best make.
One 14-Inch Vertical Feed Mill; best make, new, a bargain.
One No. 6 Dustless Separator; new, a bargain.
One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.
Two No. 1 Corn Shellers. New.
One No. 2 Purifier. New. Best make. A bargain.
For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

M-I-L-L-E-R-S

Wanting Bolting Cloths should write for discounts on same before purchasing elsewhere to

SAMUEL CAREY,
17 Broadway, New York.

MILL WANTED.

I want to rent a good water power custom mill for a long term of years. For particulars address "W," care of THE MILLING WORLD, Buffalo, N. Y. 1619

FOR SALE.

Flour-mill, corn-mill and cotton-gin, in a new growing country, splendid for wheat. Good opening for a mill-man who understands the business. For particulars apply to W. J. MILLER & CO., Ballinger, Texas. 2023

PETER PROVOST'S VALUABLE PATENT FOR SALE.

SOMETHING ENTIRELY NEW. A RARE CHANCE FOR SPECULATION.

No wide-awake manufacturer will deny that this is an age of progression, and that there is some thing new and more useful taking the place of the old, and still there are a few old fogies, who shut their eyes to the progress of art and science and say that patents are all humbugs and imagine every thing is perfect, just as our great-grandfathers thought when they called Fulton "crazy" when he discovered the use of steam. It is so with heating wheat and steaming wheat for cleaning. They say: "Some wheat does not need steaming, Peter Provost." They do not take into consideration the fact that nearly every thing of any value has one day been patented. Had it not been for inventors, we would be in the same state of affairs as when Adam and Eve were without even a suit of clothes. Then, certainly, no sane man can deny that inventors are the founders of improvement, and that it is right they should be protected by patents, securing to them a remunerative reward for their labors. When someone invents new and more useful machines, like Peter Provost's grain-scourer, patented Feb. 26, 1889, and No. 396,538, or tools and implements better than those in use, the wise manufacturer, who possesses that quick perception and sound judgment that eminently qualify him to discriminate between the truly useful implement and that which appears to be such, at once proceeds to investigate the merit and utility of the invention, to see whether or not it will pay to invest in its manufacture. I will sell state rights. Address, PETER PROVOST, Menominee, Mich. 1821

BUFFALO elevator business will probably be very closely scrutinized for some time in consequence of the Sherman incident. Well, probably a little vigilance will pay. There is no use in locking the door before the steed is stolen. After the theft is the proper time.

IT is a cool day, even in this abominably hot weather, that does not bring some millions of British syndicate money into the United States for investment. We think our British friends are making some exceedingly foolish investments in Yankee enterprises, and we fear that it will not take a long time to convince them of that fact. The flouring-mill investments will rank high among their unprofitable ventures.

DAKOTA conditions are fully set forth every day. The same may be said of Montana. Not a single effort is made to conceal the disaster wrought in those territories by the terrible drouth of the past two months. The adjoining sections of Manitoba are probably quite as seriously scourged by the drouth, but Canadian reports do not indicate the real state of affairs across the border. We sincerely hope that Manitoba has, not only an average, but an abundant crop. Another season of disaster following upon that of last season will be a serious infliction upon the sturdy Britons who have settled in Manitoba. If Manitoba has suffered as seriously as Dakota, let no false claims, no concealment, no misrepresentations be made. The truth must come out. Tell it at once and discount its effects. That is the way on this side the border.

THE winter-wheat, now harvested, is the finest grain this country has ever grown. The grains are large, plump and firm, and in color they are all that can be wished. In Indiana the best lands yielded from 30 to 40 bushels to the acre, and in all the winter-wheat states the average yield was high. The winter-wheat acreage was about 24,925,000 acres, and the total yield is thought to be about 340,000,000 bushels. In spring wheat the harvest is yet to come, and it is definitely known that Dakota will fall at least 30,000,000 bushels below the anticipated crop, because of the serious drouth that has prevailed in that territory for many weeks. Dakota will probably not yield over 25,000,000 bushels this year, and the Minnesota crop is estimated at 30,000,000 bushels, making the estimated total for those two divisions only 55,000,000 bushels, against about 70,000,000 bushels last year. Outside of Dakota the spring-wheat conditions are favorable. The total acreage is 13,780,600 acres, and the probable crop of spring wheat is estimated at 153,000,000 bushels. Should that figure be realized, the total winter and spring wheat crop of the season will be 493,000,000 bushels, or nearly 100,000,000 bushels more than the crop of 1888. The sympathy of the country will go out to the wheat-growers of Dakota, and, if present reports are reliable, that sympathy will take the form of money during the coming winter, as the drouth has practically destroyed all the crops in that territory excepting in some of the river valleys.

THE BUFFALO INTERNATIONAL FAIR.

Buffalo is becoming famous for the great fair which is held in the city each year. In 1888 the fair attracted over a half-million visitors. This year the International Fair, which will be open from Setember 3 to September 13, promises to attract a still larger number of visitors. The railroads, surprised as they were at the enormous amount of business which the Fair brought to them last September, have of their own accord made exceedingly liberal rates this year and are taking the necessary steps to accommodate an enormous amount of travel. To those readers who attended the fair last year it is only necessary to point out the fact that a number of new buildings have been erected and that a large sum of money is being expended upon the Fair grounds, in order to excite greatly increased interest in the forthcoming exposition. They will remember the impression which was made upon their minds as they entered the ground last year and will no doubt wonder at the enterprise which, not being satisfied with the completeness of the Fair a year ago, has led to an increase in its facilities for entertaining the public.

The Art Gallery, adorned as it was last year with one of the greatest of all modern paintings and with its walls thickly hung with hundreds of canvasses of the most eminent American painters, must have seemed to the average visitor as complete and perfect an institution of the kind as could be expected at any fair or exposition. We find now that this gallery was but an L to the structure permanently designed for the inspection of fine arts. When the fair opens this year visitors will see an art gallery of which any city might be proud. Its architectural beauty is of itself entrancing, and in the building will be found a finer collection of paintings than was ever before gathered together in any city in this state outside of the city of New York. The list includes Makoffsky's "Russian Wedding Feast"; Munkacsy's "Last Hours of Mozart"; Poore's prize picture "The Night of the Nativity," and over four-hundred canvasses from the very best American painters.

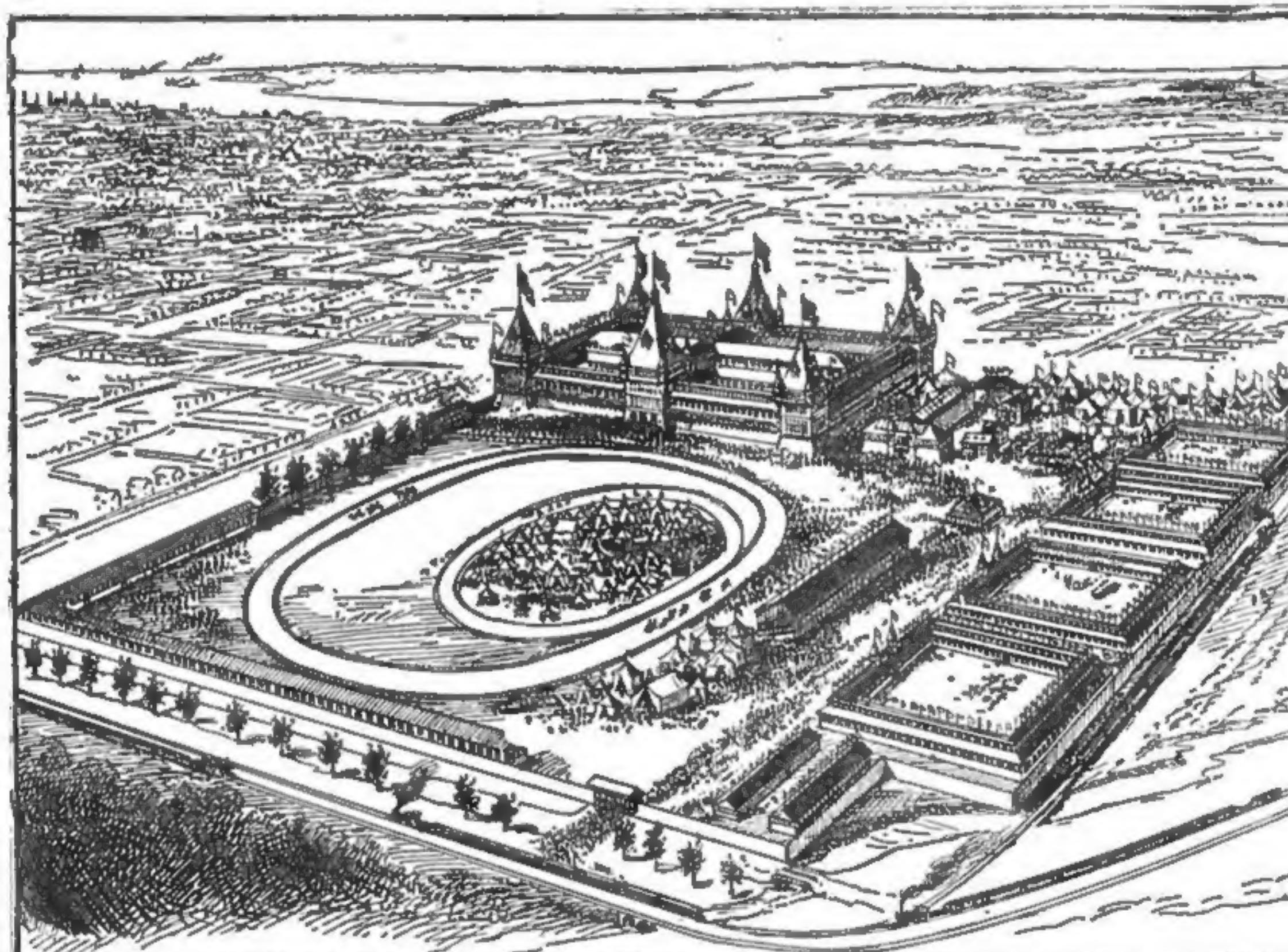
As in the case of fine arts, so it is with all other departments of the exposition; facilities for display have been increased. It was thought last year that the horse show in connection with the International fair was the finest, largest and grandest show of the kind ever held in America; in fact that was the popular verdict concerning it. The managers of the Fair seem determined to out-do their previous effort even in this particular, for an additional horse-show building four-hundred feet square is being constructed. If one were to measure the lineal dimensions of the live-stock buildings already completed and being erected, he would be surprised at the number of acres covered by the same. There is no question that Buffalo has outstripped all competitive fairs in the importance of its live-stock features.

The Main Exposition building remains as it was last year the largest permanent Fair building in the world, and the applications for space which are daily being received leaves no room to doubt that its contents will be more interesting than before. At least two of the large courts in this building will be devoted to the purposes of a tobacco exhibition. No exposition of this great industry, which interests directly and indirectly so large a portion of the United States, has ever been attempted in the North. It was with difficulty that the managers of the fair succeeded in inter-

esting southern growers and manufacturers of tobacco, but now that they are interested they seem determined to make their share of the fair a glowing success. Every thing pertaining to the tobacco industry, from the sprouting of the plant to its complete manufacture in the shape of cigars and cigarettes, will be illustrated. Some of the tobacco houses will have old plantation negroes on the scene enlivening the manufacture of the weed with melodies from their banjos and guitars.

Another important feature of the industrial portion of the fair will be a convention of inventors, who will exhibit all manner of curious working models. The machinery portion of the fair will not be neglected, although it has been found impossible this year to complete a separate machinery hall. In connection with this department it is interesting to know that the Lumberman's Exchange of Buffalo has offered a prize valued at \$100 for the best portable saw-mill in operation at the fair. Many other special prizes have been offered in various departments by individuals and societies. Much attention is being paid this year to the purely amusement features of the fair, and a great deal of healthy and exciting sport is promised through the races on the flat and the jumping contests and steeple-chases of hunting horses. Five well-known hardware firms of Buffalo offer a prize of \$100 open to hunting horses. As a new building is being erected for the executive offices of the fair, the spacious Queen Anne cottage which was used for office purposes last year will this year be turned into a cafe and restaurant.

From the broad verandas of this cafe visitors to the fair will be able to enjoy the delightful open-air concerts, which will be furnished by Cappa's famous Seventh Regiment band, of New York, and to witness all the out-of-door sports and spectacles.

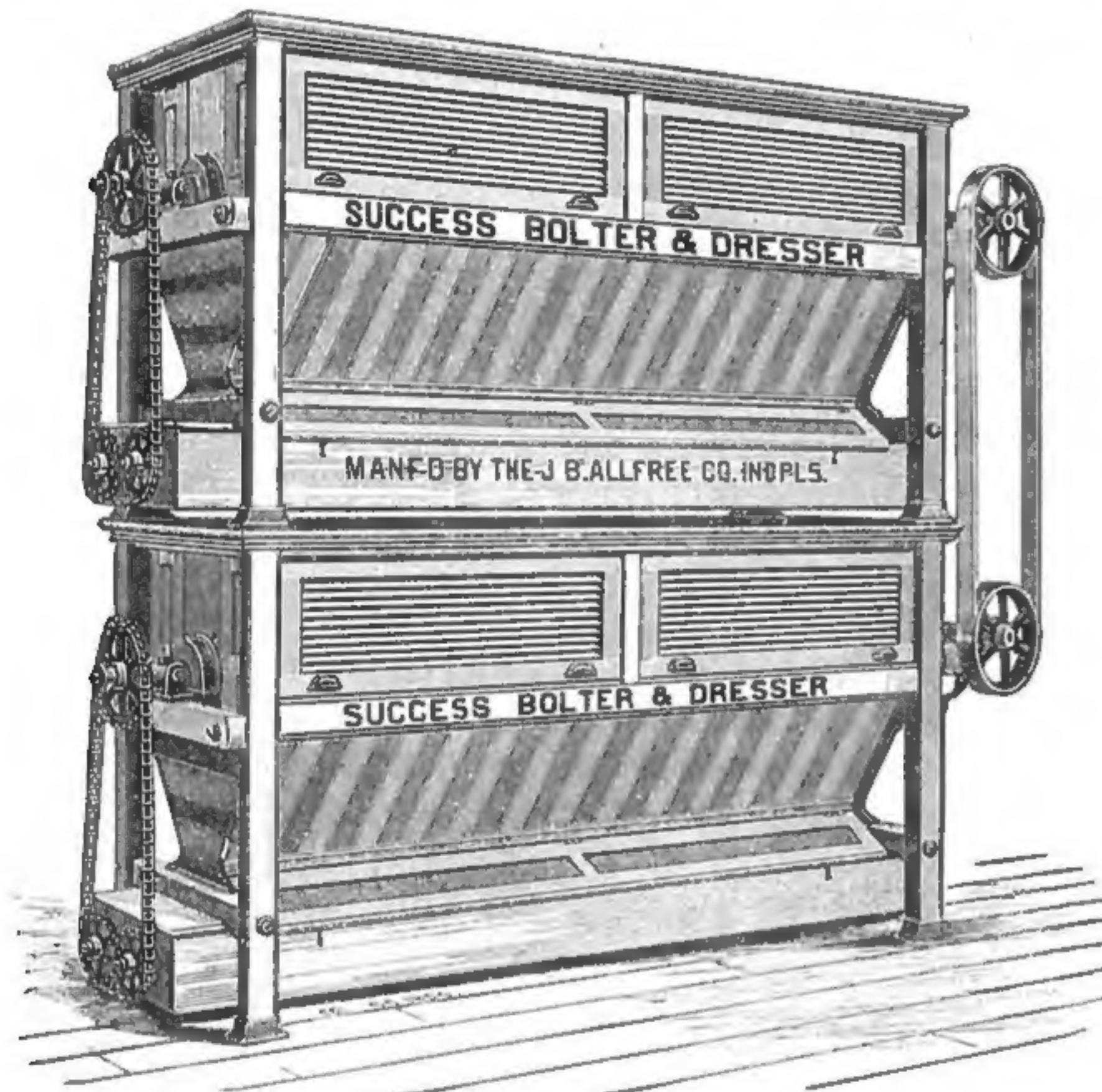


BIRD'S-EYE VIEW OF THE BUFFALO FAIR BUILDINGS.

DAKOTA CROPS DOOMED.
Drouth has played havoc this year in Dakota. A dispatch of July 16 says: The wheat crop of Dakota is 30,000,000 bushels short. The total production for the territory can not under the best possible conditions from now until harvest, which will begin in the North by the 25th, exceed 20,000,000 bushels, and to put it that high is a liberal estimate. The greatest detriment to a successful crop this year has been the exceedingly dry season, and only along the streams will there be any crops at all. Along the main line of the Northern Pacific, the once bonanza farm district, the elevators are closing up and the country tributary to Bismarck is a barren sand-hill. The Jim river valley will barely feed its people, and, in short, nowhere in Dakota will there be any wheat for export save along the main line of the Manitoba from a point 30 miles north of Fargo. The cry of famine that was raised last winter in the western part of Walsh county will find its echo all over the territory the coming winter. Aside from the impoverishing of the people by the failure of the wheat, there is another danger which will be felt almost as severely, and that is the want of fodder for stock. The oats crop is bad, and the meadows away from the river bottoms are as parched as the prairie. A trip through Montana reveals the same state of affairs. The range cattle will not find enough to live on until cold weather, and a prominent railroad official told the correspondent that all the extra cars of the Northern Pacific and Manitoba roads were ordered to Manitoba to be ready to clear out the steers when lack of feed necessitates a reduction of stock.

THE "SUCCESS" BOLTER AND DRESSER.

The accompanying engravings represent the famous "Success" bolter and dresser, manufactured by the J. B. Allfree Company, of Indianapolis, Ind. The engravings give two views of this machine, which was designed to supply the want of a machine not so severe as a centrifugal, but able to bolt more rapidly and regularly than the old-style reels. The "Success" accomplishes results far more satisfactory than were anticipated by its inventor. Its construction is somewhat novel but extremely simple. The interior of the bolting-cylinder or reel is provided with a series of elevating shelves, their backs being adjustable so that the space between them and the cloth may be increased or diminished, at one or both ends, to suit the charge of material upon the reel and also the kind of material. By this arrangement the machine is put under perfect control. With an ordinary charge they will be found to work best placed about one inch away from the cloth at the tail end of the reel. The object is to diminish the space proportionately to the decrease of material inside the reel. This is done by slackening the thumb-nut and slightly rotating a segment-lever. One other leading feature of this bolter is that cloth can be kept stretched endwise so as to obviate the difficulty of the sagging between the circular ribs, which is very detrimental to bolting. This is done while the machine is in operation, or standing, by turning a nut at the end of the shaft, which draws the tail head of the reel toward the end of the machine,



THE J. B. ALLFREE Co.'s "SUCCESS" BOLTER AND DRESSER.

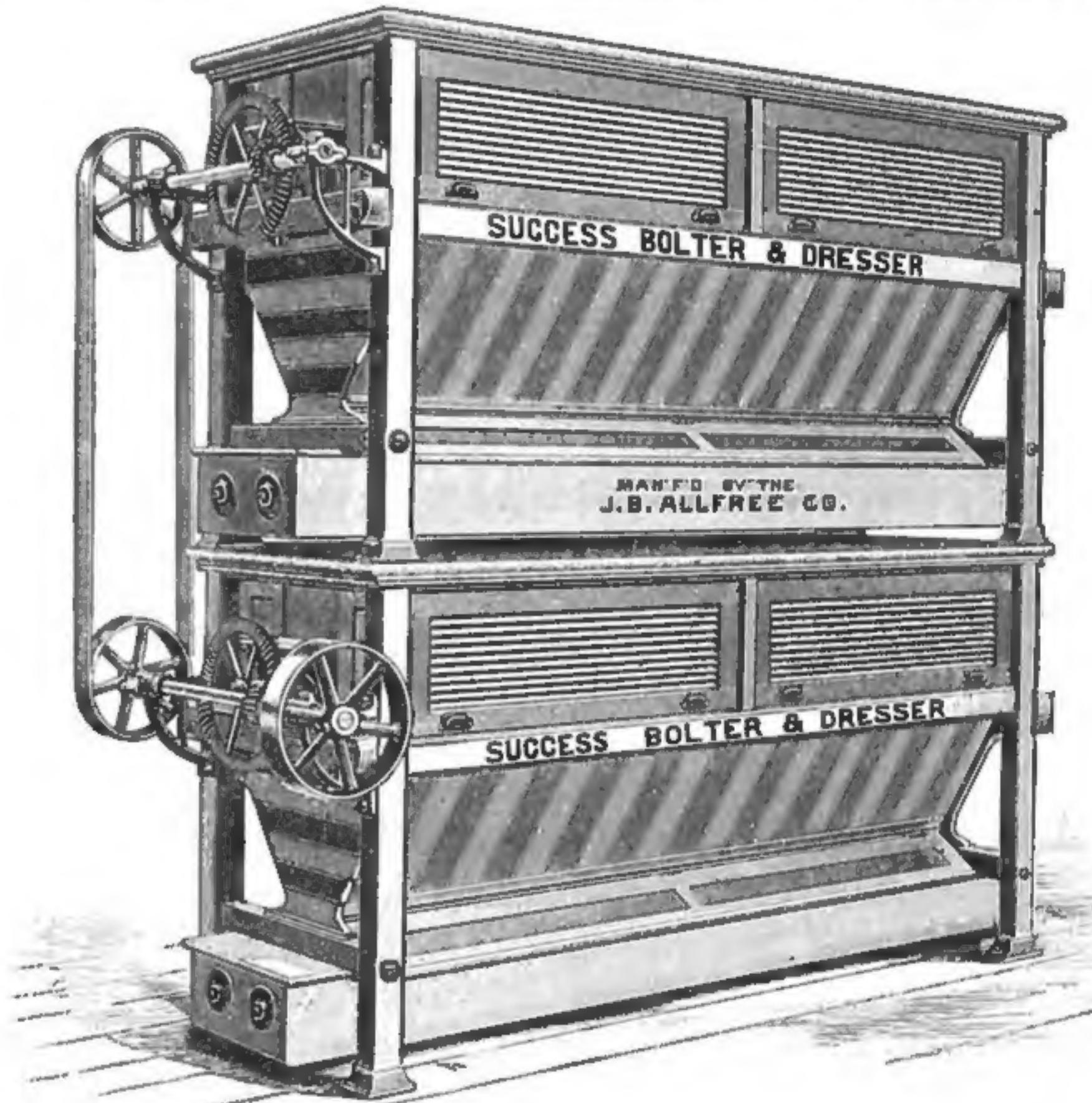
stretching the cloth evenly from end to end. The machine is built of the very best material, being principally of hard wood, no pains being spared to make it complete in workmanship and elegant in appearance. Surely no better machine has yet been placed before the milling public. The makers have been slow to advertise it, desiring fully to test it on all kinds of material. The success it has already attained, together with a largely increasing demand, warrants them in greatly improving their facilities for its manufacture, which also enables them to offer it at an extremely low price.

AMERICAN CRACKER MANUFACTURE.

According to a New York journalist's account the manufacture of crackers has grown to be a great industry in this country, and in the city of New York alone probably 4,000 men, women and children are employed in this work. It is only within the last fifteen years that the business has grown to such prominence. Before 1870 the only crackers made in this country were the old-style or standard soda, milk, butter, lemon and oyster crackers, ginger-snaps and pilot-biscuit. The only kind of fancy cracker made at that time was a dry, slightly sweetened biscuit made up in peculiar forms. The rapid growth of the cracker-baking industry can be ascribed

to the brisk demand that followed the introduction of the fancy crackers or English biscuits first brought into this country in 1868. These biscuits were imported by a well-known grocery house of New York. Although their cost to the consumer was more than double the price asked for the homely domestic cracker of the day, there was at once so great a demand for them that the importers were not able to keep their customers supplied. The first of these crackers brought to this country were known as "Cornhill" biscuit. They were of various shapes, were toothsome and novel and seemed to fill a void in the American picnic bill-of-fare. The ready sale which these crackers met induced the firms engaged in supplying the American market to forward a large consignment of "Albert" biscuit. These biscuits found as ready a sale as the "Cornhill" crackers did, and about a year later the first "fruit" crackers were put on sale in the American market. For two or three years all the crackers of these three varieties used here were imported from England and were sold at prices ranging from 25 to 40 cents a pound.

The first "Cornhill" biscuit made in this country were manufactured in 1869 by John Holmes, who is still engaged in the industry. The machines in which the crackers were made and the dies for cutting them out were imported from England, and it is even reported that Mr. Holmes employed men from the other side of the ocean to mix the dough and make the crackers. In 1870 the first "Albert" biscuits were



THE J. B. ALLFREE Co.'s "SUCCESS" BOLTER AND DRESSER.

made in this country. These were also made in English machines and cut out by dies imported from that country, but these were the only machines brought to this country. All others were made here, and the many improvements in the machines and dies have apparently brought cracker manufacture to a state as near perfection as possible. American ingenuity and mechanism have advanced the industry much more rapidly in this country than it has advanced in England, and while about fifteen years ago there were probably not more than a dozen varieties of fancy crackers, most of which were brought from England, to-day there are more than 200 varieties manufactured. Moreover, there are more crackers shipped from the United States to England in one year than were imported into this country in the three years previous to the date when the manufacture was begun here. Not only this, but the United States is also carrying on a very heavy trade with Brazil, Mexico and other South American countries, and with Cuba and other islands in the West Indies.

There are in New York City to-day 16 cracker-bakeries, two or three in Brooklyn, and factories in Boston, Philadelphia, Chicago, Buffalo and every other large city. The total number of firms engaged in this business can not be definitely learned, but a well-known manufacturer says that it would

producing capacity ranging from 100 to 600 barrels of crackers per day each. There is apparently no end of making new designs for crackers. Some of these "take" well and meet with a steady sale. The demand for others lasts a little while and then falls off, while others still are a total failure. "Alphabets" and "Dominoes," both of which have names sufficiently descriptive, have about had their run, the demand for these varieties being now very light. Medallions made to represent the faces of Gen. Grant, Peter Cooper, Gen. Butler and other well-known persons found a ready sale for a short time. In the campaign of 1884 "campaign" crackers, made to represent the faces of Cleveland and Blaine, were put on the market by one firm. The smallest cracker made is the "imperial dot," and the purchaser who buys a pound package of this variety can, if he has 14 children, give 100 crackers to each of them. These crackers are very popular. Other favorites are the "Oswego," "snowflakes" and macaroons. Many of the finer varieties have a coating of icing or chocolate, while others still, of the larger sizes, have white or colored icing laid on in fanciful devices. These designs are made by means of a pair of bellows, the nozzle of which is of the shape of the design required, and icing is forced through upon the surface of the cracker while it is still warm.

In one of the largest cracker factories in New York city the work of manufacturing was watched by a reporter. In this bakery the weekly supply of materials is 600 barrels of flour, 3,000 pounds of butter, 20,000 pounds of lard, 80 barrels of sugar, 25 barrels of molasses and 15 barrels of dried currants, together with eggs, honey, corn-starch, flavoring extracts and other ingredients. The mixing of the dough, the rolling, the stamping and the entire process of making all but a few of the finer grades of crackers are done by machinery. The mixing-machine is on the second floor of the building. This is a large wooden cylinder, with a number of wooden chutes leading into it. Through one of the chutes the necessary amount of flour is supplied, through another the sugar, another the milk, another the water and so on. In the mixer are three bars or spoons, revolving alternately, after the style of the ice-cream freezer, which thoroughly mix the dough. When mixed the dough is taken to the third floor, where a number of bins are placed in which it is set to "rise." When ready for baking it is again taken to the floor below, where it is placed on a tray and kneaded by the bakers. As they knead it, portions are sliced off, which are put in the rolling-machines and are run under the rollers four or five times, until the paste is thin enough. It is then placed on the cracker-making machine in the form of a continuous belt of dough.

This first passes under another roller, with knives at each end, which cut off superfluous dough at the edge of the belt and trim it to the proper shape. It then passes to the cutting or die machine. This is a large drum which cuts the dough into the form which the crackers are to have, and at the same time stamps the name of the cracker, or the manufacturer, or any design that is desired. As the crackers pass out from under the cutting machine, they are pushed on to trays, which are taken at once to the ovens. These are reel or cylinder ovens, which are about twenty feet in diameter and have the fires at the bottom. Above the fire is a large wheel or cylinder. On the outer frame of this are ten swinging wire trays. On these trays the crackers, as they are turned out from the stamping-machines, are placed, and the wheel revolves slowly, lowering the next tray into position. Thus the wheel is kept in constant motion, the trays stopping over the fires just long enough properly to bake the crackers, which are removed from the trays after making one circuit of the oven. In stamping or cutting soda and other square crackers there is little waste, but in cutting out others of more fanciful forms fully one-half the dough that passes under the die is unused. This is not wasted, as it is again passed under the rollers. The surplus material is separated from the perfectly formed crackers by an ingenious contrivance, consisting of an iron bar with a toothed edge. The soft crackers, such as "lady-fingers," "butterscotch" and "honey-cakes," are baked in square ovens resembling the ordinary house oven. Some of these cakes are

made by hand, but most of them by machine. The dough, which is soft, is placed in hoppers with perforators in the bottom. Through these holes the dough is dropped upon pans in the form which the cracker is to have.

The process of making cocoa-nut cakes, for instance, is this: The dough is dropped upon the pans, six or eight cakes on each. Then, as it adheres to the pan, a baker turns it upside down, just touching the cakes into a vat of pulverized cocoanut. The tray is next put in the oven, and in two or three minutes the crackers are baked. Then the crackers are taken to the upper floor of the building and, after cooling and hardening, are packed in barrels or in the square tins with glass fronts with which every one is familiar. This work is done by boys and girls. Every thing about the bakeries is kept in good order, there is no dirt or dust, and all the materials used, the manufacturers declare, are of the best grade. The currants used in making the fruit-crackers are first washed and then carefully sorted over. The process of making the fruit-cracker is somewhat different from that of other flat or hard crackers. The dough is rolled a little thinner than for the common cracker, a layer of currents is spread over it, and then another layer of dough is placed upon this. The dough is next run through the machine. In making the "flake" crackers, a very light soda biscuit, the dough is also rolled very thin, and the crackers are in the reel oven less than half a minute. These wafers are so thin that the name or design on them can be read by looking at the reverse side as the cracker is held to the light. Another style that calls for special mention is the "charcoal" cracker. This is made by mixing finely pulverized charcoal with the dough, and the variety is held in high esteem by dyspeptics.

THE COMING INTERNATIONAL CONGRESS.

Secretary Barry, of the Millers' National Association, has received the following communication from Secretary of State Blaine:

DEPARTMENT OF STATE,
WASHINGTON, June 17, 1889.

Secretary Millers' National Association, Milwaukee, Wis.:

SIR: In anticipation of the meeting of the international American congress in this city on Oct. 2, 1889, the secretary of state begs to inclose herewith a copy of the act indicating what will be the subjects of discussion. As the object of the meeting is simply the discussion of certain large and important commercial and industrial questions of direct interest to this country in its relations with the other powers of the North and South American continents, the secretary naturally desires all the information and suggestion which he could derive from the boards and chambers which represent so fully the interests under consideration. He will, therefore, be glad to receive from your distinguished body, either officially or by such individual members as it may select, such suggestions as may occur upon consideration of the subjects referred to. Any communication in reply will be addressed to the secretary of state, indorsed "International American Congress." I have the honor to be, sir, very respectfully,

JAMES G. BLAINE, Secretary of State.

Enclosed in the letter was a copy of the act, which provides for a conference between the United States and the republics of Mexico, Central America, Hayti, San Domingo and the empire of Brazil, and which enacts that the purpose of the congress be to discuss and recommend for adoption some plan of arbitration for the settlement of disagreements and disputes which may hereafter arise, and for the consideration of questions relating to the improvement of business intercourse and means of direct communication between the countries represented and to encourage such reciprocal commercial relations as will be beneficial to all and secure more extensive markets for the products of each. The act also stipulates that in forwarding the invitations it shall be set forth that the conference is called to consider measures for the preservation of the peace and to promote the prosperity of the American states, for the formation of a customs union and the establishment of a uniform system of customs regulations for governing the importation and exportation of merchandise, a method of determining classifications and valuations in the ports of each country, a uniformity of invoices, the adoption of a common system of weights and measures and laws to protect the patent rights, copyrights and trade-marks of citizens of either country in the other, and for the extradition of criminals; the adoption of a com-

not be an exaggeration to place the number at 400, with a mon silver coin to be a legal tender in all transactions between the citizens of the countries; a definite plan for arbitrating all disputes and differences that may arise, and to consider such other subjects as may be presented by any of the parties to the conference. The sum of \$75,000 is appropriated for expenses incidental to the meeting. Ten delegates, who shall serve without compensation other than their necessary expenses, are to be appointed by the president to represent the United States, the other states to be represented by as many delegates as each may elect; but no state shall be entitled to more than one vote in the disposition of questions coming before the conference. Clerks and other assistants shall be appointed by the secretary of state, who shall fix their compensation, and he shall also provide for the publication daily of the proceedings, and upon the conclusion of the conference shall transmit a report of the same to congress. Following is the reply of the secretary of the Association to the communication:

MILLERS' NATIONAL ASSOCIATION,
SECRETARY'S OFFICE,
MILWAUKEE, WIS., July 5, 1889,

Hon. Jas. G. Blaine, Secretary of State, U. S. A., Washington, D. C.
SIR: Your communication of June 17 received and noted. The subjects referred to are undoubtedly of the greatest interest to members of the Millers' National Association. Your circular will be presented to our executive committee at its next session, and advice as to their action in the matter will be furnished you at an early date.

Very respectfully, FRANK BARRY,
Secretary.

BREADSTUFF EXPORTATIONS FOR A YEAR.

During the fiscal year ended June 30, 1889, there was a great deal of talk about the "ruination" of the breadstuff exportation trade of the United States. The government statistics for that year do not reveal the ruin. In fact the record shows that the trade was, on the whole, large during the twelve months ending June 30, 1889, and that, notwithstanding the falling off in the exports of wheat grain and wheat flour, directly in consequence of the wheat shortage in 1888, the total of the exportations is only slightly below those of the preceding year in value. The government figures show that for the fiscal year just ended the barley exports were 1,435,091 bushels, worth \$850,795, against 537,370 bushels, worth \$308,863; the corn exports were 69,215,104 bushels, worth \$32,803,065, against 24,076,625 bushels, worth \$13,243,026; the corn-meal total is 309,563 bushels, worth \$864,279, against 268,107 barrels, worth \$758,155; the oats total is 612,684 bushels, worth \$241,048, against 307,770 bushels, worth \$130,252; the oatmeal total is 10,201,312 pounds, worth \$272,307, against 4,311,981 pounds, worth \$129,900; the rye total is 287,845 bushels, worth \$158,905, against 78,783 bushels, worth \$50,705. Every one of these lines shows an important increase.

Coming to the great items of wheat and flour, the record shows the wheat grain total to be 45,956,216 bushels, worth \$41,234,779, against 65,186,257 bushels, worth \$55,854,298, for the preceding year. The wheat flour total is 9,026,886 barrels, worth \$43,786,059, against 11,840,460 barrels, worth \$54,226,884. The decrease on these two items, making comparison with the preceding fiscal year, is the difference between \$110,081,182 and \$85,020,838, or \$25,060,344. The total breadstuff exportation for the past fiscal year footed \$120,211,237, against \$124,702,083 for the preceding year, a decrease in the aggregate of only \$4,490,846, notwithstanding the decrease of over \$25,000,000 in wheat grain and flour alone. THE MILLING WORLD has steadily refused to accept the wailings of the pessimists, and the event has justified our confidence in the vitality of the breadstuff trade of the United States. Even in the two important items of wheat grain and flour there was a marked improvement during the last months of the fiscal year, and the conditions at home, an abundant crop of very high quality, and the conditions abroad, a deficient crop of very poor average quality, seem to warrant the belief that the current fiscal year will see those two items take their wonted place in the list. We do not believe that the American breadstuff trade is dead. We

do not believe that it is dying. There is nothing to show that it is diseased. During the past six years it has withstood the competition of the whole world, and to-day, after a year of unfavorable conditions, it is still strong and still shows signs of increase. Only keep off the gamblers, and the business will expand. If all the evils that afflict wheat, drouth, flood, wind, hail, frost, Hessian fly, army-worm, green midge, stinking smut, chinch-bug, grass-hoppers and all similar things, could once be turned upon the speculators, all legitimate business would become buoyant and prosperous.

POINTS IN MILLING.

EVER since the European flour-makers began to go crazy over the vaunted Haggenmacher "plansichter," it has been a question why that machine has not made its appearance in the United States. That question is now satisfactorily answered. The trials of the "plansichter" at Louvain, Belgium, in competition with the George T. Smith Middlings Purifier Company's inter-elevator and centrifugal reel, demonstrated that the vaunted German machine, instead of being able to lead the procession, is not able to keep up with the procession, especially the American procession. The Smith machine beat the Haggenmacher machine in both quantity and quality, and the Louvian contest settled the superiority of the American machine uncontestedly. The Haggenmacher "plansichter" may now take a back seat. The "revolution" has ended in smoke, and the milling fraternity the world over must still look to the United States for the best milling-machines. European machines are good, but American machines are better. We must now wait for another "epoch making revolutionizer."

MILL fires are often labeled "indendiary" or "mysterious" in origin. Judging from the complaints I hear millers make about the difficulty they find in getting a reasonable amount placed on their mills, and about the high rates of insurance they are compelled to pay, I think the suspicion of incendiarism must be wrong, unless the incendiary be some one beside the owner. I have never yet found a miller who could afford to have his mill burned. The insurance is always so much less than the cost of the plant that a fire means a certain loss every time the plant is destroyed. During the past month I visited four burned mills. Every one of the four had been declared in the newspapers to be "fully insured." Inquiry revealed the fact on the first the loss above the insurance money was \$15,000, on the second \$11,500, on the third \$8,000, and on the fourth \$5,400, leaving out the loss of time and custom from the date of the fires to the day when the rebuilt mills shall be in operation. Did any one ever hear of a mill fire case in which the insurance really "fully covered" the loss?

SPECIAL NOTICES.

BOLTING CLOTH.

Do not order your cloth until you have conferred with us. It will pay you, both in point of quality and price. We are prepared with special facilities for this work. Write us before you order.

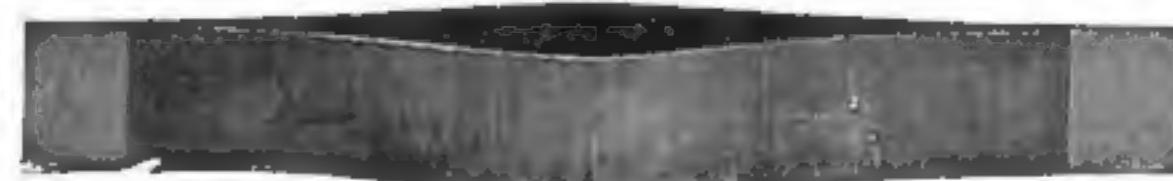
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SILVERING IRON.—A new Austrian patented process for silvering articles of iron is thus described: The article is first plunged in a pickle of hot dilute hydrochloric acid, whence it is removed to a solution of mercury nitrate and connected with the zinc pole of a Bunsen element, gas carbon or platinum serving as the other pole. It is rapidly covered with a layer of quicksilver, when it is removed, washed and transferred to a silver bath and silvered. By heating to 300° C. (572° F.) the mercury is driven off and the silver firmly fixed on the iron. To save silver the wire can be first covered with a layer of tin; 1 part of cream of tartar is dissolved in 8 parts of boiling water, and one or more tin anodes are joined with the carbon pole of a Bunsen element. The zinc pole communicates with a well cleaned piece of copper, and the battery is made to act till enough tin has deposited on the copper, when this is taken out and the iron ware put in its place. The wire thus covered with tin chemically pure and silvered is much cheaper than any other silvered metals.

GENERAL NOTES.

AT the close of 1887 Brazil owed \$489,030,590; Argentine Republic \$313,888,725; Peru \$250,000,000; Mexico \$144,053,-885; Chili \$83,724,695; Uruguay \$75,425,385; Costa Rica \$12,615,295; Guatemala \$10,643,460; Paraguay \$6,987,000; Bolivia \$6,159,710; Nicaragua \$1,396,030. Including Venezuela, Ecuador and Colombia, the total Central and South American debts amount to \$1,500,000,000.

COTEMPORARY COMMENT.

A year ago the Millers' National Association met at Buffalo. There were hundreds in attendance, the spirit of the gathering was harmonious, and important work in new directions was inaugurated. Last month the Association held its convention at Milwaukee. The attendance of millers, not counting those of Milwaukee, nor the mill-furnishers and members of the milling press, was 27. In fact, the mill-furnishers and representatives of the milling press could have held a session quite as fully attended as were the sessions of the so-called Millers' National Association. As a fiasco the convention rivaled the famous St. Louis convention of 1887, when the Association descended to the lowest depths of self-stultification in lending itself as a card to a milling newspaper. Why such a difference between the Buffalo meeting and the Milwaukee meeting? The fellows who have run the Association into the ground and covered up the hole will probably not admit that there is any good reason for the disparity in attendance and enthusiasm. They will forget all about the enthusiastic meetings at Milwaukee last December and at Indianapolis in February. They will simply refuse to account for the fiasco. But there is a reason, and

some of them know it, whether they acknowledge the fact or not. The Buffalo meeting was the joint result of the good will of the entire milling press. That good will was obtained by false promises to the effect that the Association was to be worthy of its name of "National", that it was to inaugurate work in new and useful directions, and that, above all, its name was not to be used as a card for a fake calling itself the "official newspaper." The milling press, condoning the contemptible and ungentlemanly affront put upon it at St. Louis by men who would have acted more wisely had sense been in and the wine out, pulled in harmony to make the convention a success. It was a success. And then with characteristic duplicity the word of promise was broken. The grand mass convention of 27 millers at Milwaukee followed. The average mind would see cause and effect in this. And what a mockery it was to invite the co-operation of the milling press in building up the Association and then elect Mr. Greenleaf president! The gentleman who has been chosen president by 27 millers has been a "last-ditcher." He has stood by the "organ" through evil and through good report. Not even the eccentric gentleman from Tennessee has been more emphatic in his friendship for one paper and hatred of all the rest than Mr. Greenleaf. His election shows the animus of the crowd. They want a big meeting at Minneapolis next year and court the milling press to that end; and they turn about and elect a president who has never been half-hearted in his partisanship of one milling newspaper. The aspects of the case would anger any rational mind, were not the duplicity and double-dealing too apparent to deceive anybody. The worst feature of it all is that Mr. Baldwin, who has the good will of the entire milling press, introduced the resolution inviting co-operation. We do not, for one moment, class him with the "last-ditchers" who think the highest function of the Association is to cater to the advertising needs of a milling newspaper. The "last ditchers" knew that such a resolution introduced by him would carry more weight than if introduced by one of the partisans. The whole thing was well planned, but the intention was too apparent. The milling press will not bite twice at the same bait. If the next meeting is a success, it will be so entirely on account of what may happen in the *interim*. The Association is as dead as any thing can be that has organization. It is a sad example of the folly of putting a "fighting man" in charge who courts enemies and who would rather fight than eat. That sort of a man may prove a success at Donnybrook Fair; but he is out of place as the executive officer of a peaceable association of business men.—Chicago "American Miller."

Minnesota claims the biggest mills on earth, but Mississippi can knock her out. The great Sullivan-Kilrain mill in Mississippi beats any thing that Minnesota can boast of. It was a case of gradual reduction. By the way, what a strong combination as mill-builders Sullivan, Muldoon and Kilrain would make. As a scalper and dust-collector Sullivan certainly takes the biscuit. Muldoon has established a great reputation as a purifier. While Kilrain is certainly ahead on the reels. This is our first and last break.—New York "Produce Exchange Reporter."

The Canton Cabinet Filing Case Company, Canton, Ohio.

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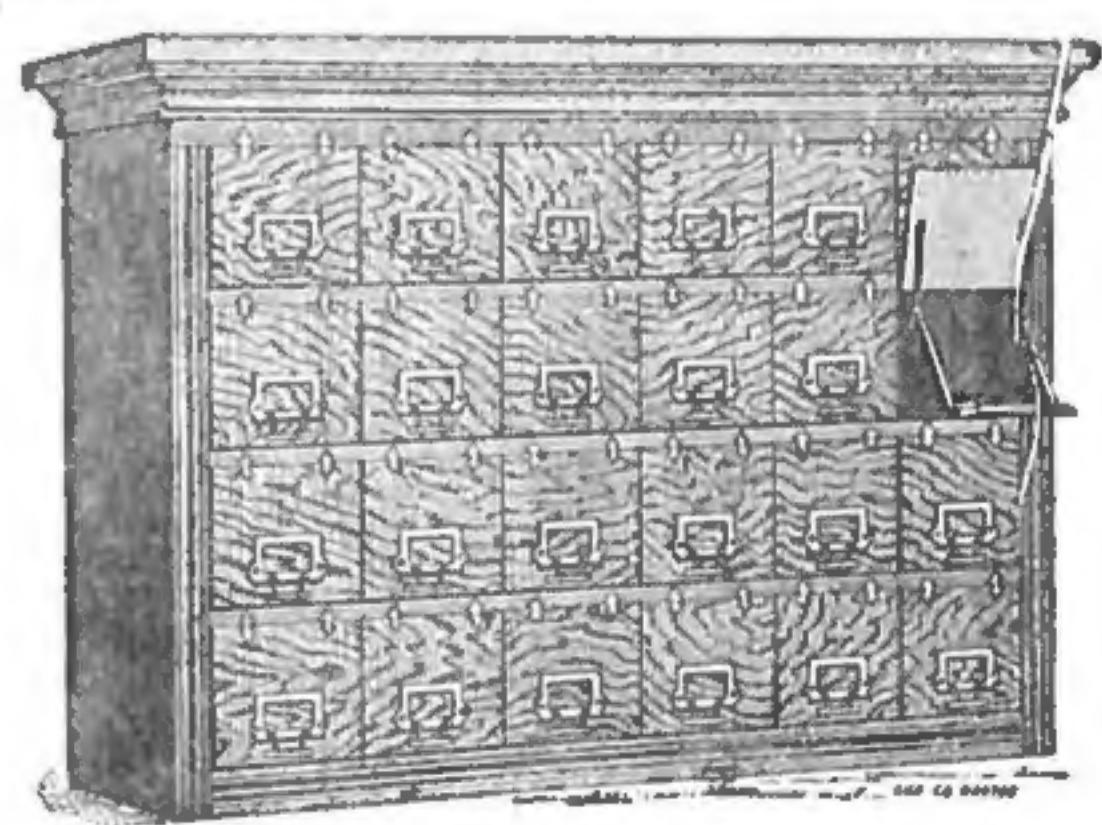


NO. 8 Represents one side of one of our Revolving Cabinet Letter Files and Document Cases Combined. It contains 20 Document Drawers and 8 Letter File Drawers. In filing letters we use first VOWEL of name on front of drawer, and LETTER FOLLOWING first VOWEL on Index Sheet within drawer. We also make more exhaustive systems which contain from 6 to 100 or more Filing Drawers.

NO. 1 Represents one of our small Document Cabinets, for use on desks or brackets. Action of drawer can be seen in the cut. When front is raised inner drawer comes forward, exposing contents of drawer for inspection.

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Not yet equaled by any form of Engine for
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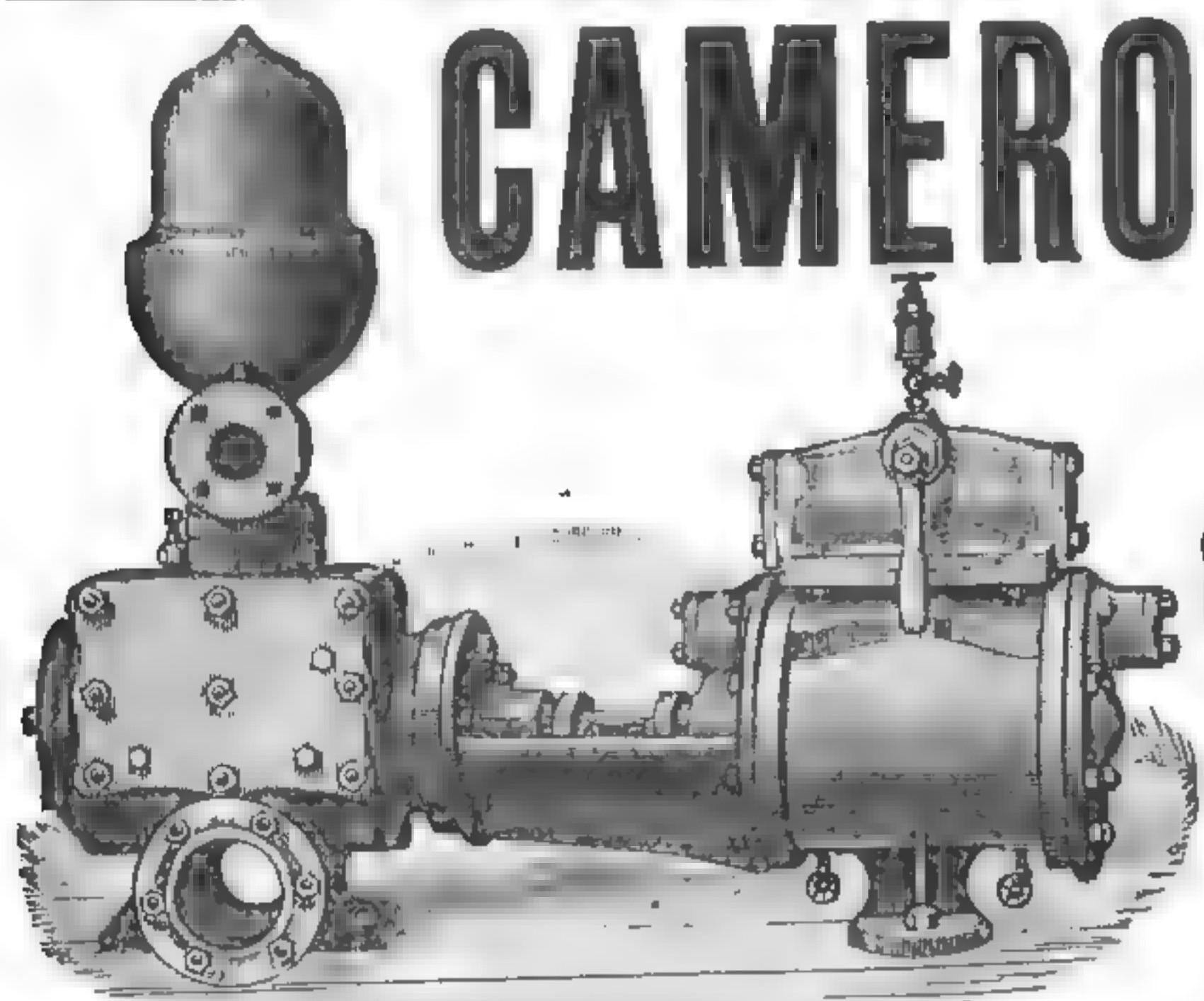
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Kansas City,	312 Union Avenue,	
Denver,	1330 Seventeenth St.	
Omaha,	1619 Capitol Avenue, F. C. Ayer.	
Pine Bluff, Ark.	Geo. M. Dilley & Sons.	
Salt Lake City,	259 S. Main St.	Utah & Montana Butte, Mont.
Granite St.	Machinery Co.	
San Francisco,	21, 23 Fremont Street, Parke & Lacy Co.	
Portland, Or.	33, 35 N. Front St. Parke & Lacy Mch. Co.	
Charlotte, N. C.	36 College St.	The D. A. Tompkins Co.
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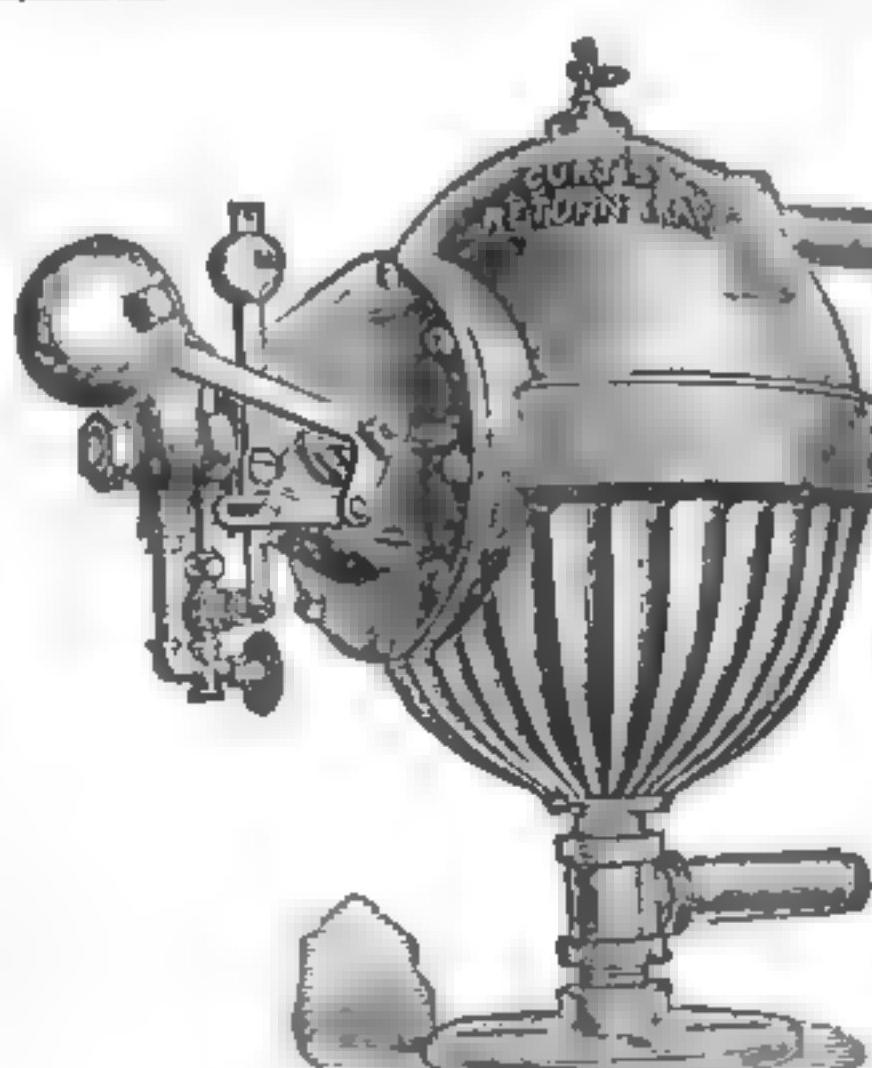
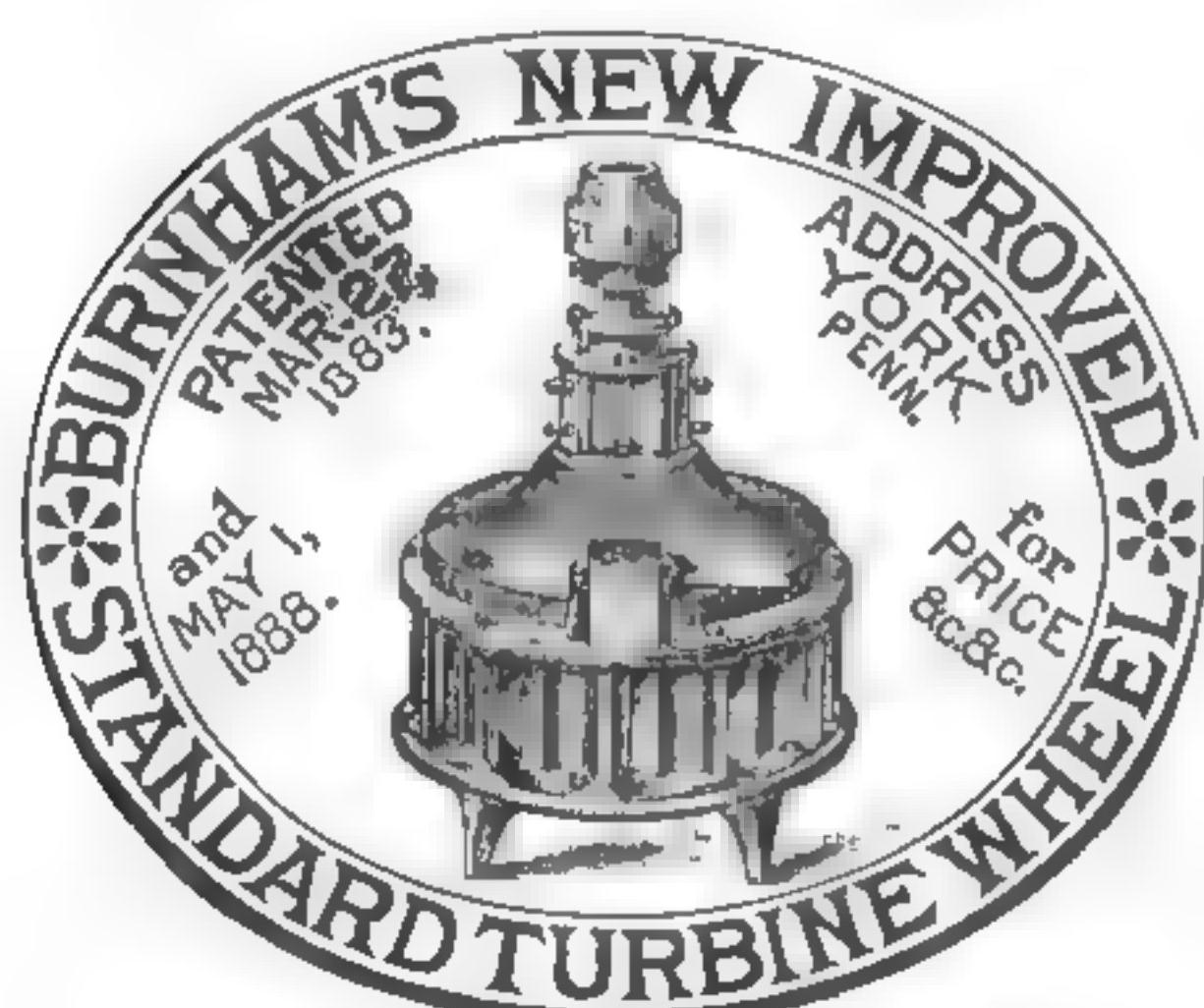
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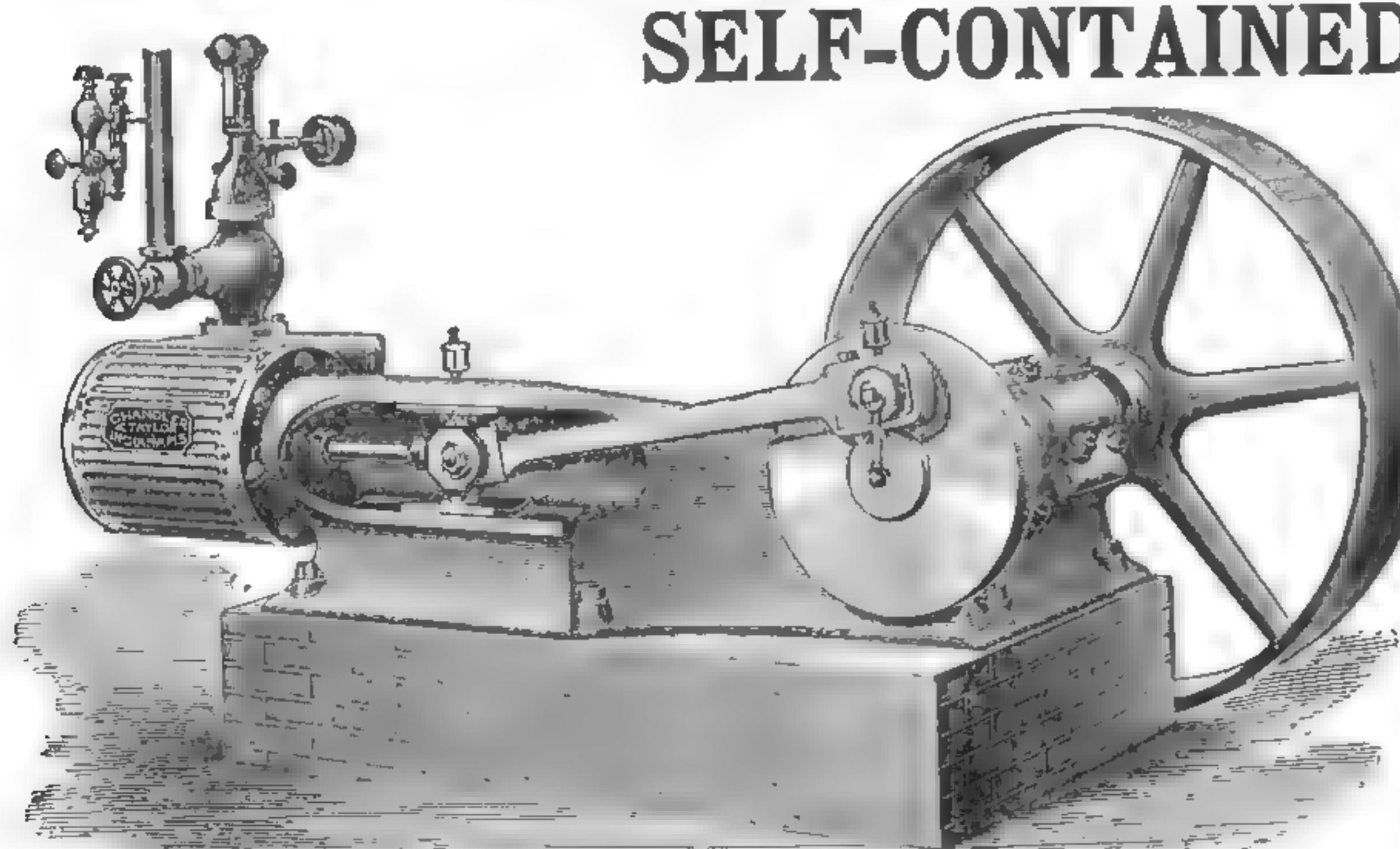
IT is noiseless, positive, rapid, will return all condensation back into the boiler, and works equally well in connection with reduced pressure or exhaust steam, also when the return is below the water line of the boiler.

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Engines, Saw-Mills and Drain Tile
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NOTES & NEWS

The Pittsburg, Ore., Mill Co. incorporated.
 A. Chalkley's mill, Flourtown, Pa., burned.
 F. & S. S. Speck, millers, Upton, Pa., assigned.
 Watkins Bros., Mt. Ida, Ark., build a flour-mill.
 Brents & Smith, Benton Ark., build a flour-mill.
 The Williams Co., Francis, Ark., remodel to rolls.
 M. Lincoln's grist-mill, Kenduskeag, Me., burned.
 Vaughn Bros., Glasgow, Ky., improve their mill.
 Schei & Chalfant, millers, Osakis, Minn., assigned.
 B. Morley, Gatesville, Tex., improves his flour-mill.
 T. K. Martin, Pungoteague, Va., builds a grist-mill.
 Mr. Lockridge, Ballinger, Tex., will build a grist-mill.
 E. A. Parks, Brownwood, Tex., will build an elevator.
 Wilkinson & Phenice, millers, Fremont, Ind., assigned.
 S. H. Stout, Owenton, Ky., will build a 100-barrel mill.
 J. A. Lorenz, Panna Maria, Tex., improves his flour-mill.
 The Kennesaw Mill Co., Marietta, Ga., remodel their mill.
 W. C. Murphy, Burgaw, N. C., wants corn-mill machinery.
 Carroll & Barclay, Russelville, Ky., enlarge their flour-mill.
 W. R. Myers, Greensburg, Ky., projects a 60-barrel flour-mill.
 J. H. Walker & Co., Reidsville, N. C., build a 50-barrel flour-mill.
 Widner & Frederick, millers, Keyser, W. Va., will remodel to rolls.
 S. R. Hawks, Lebanon, Tenn., builds a 50-barrel roller flouring-mill.
 Mr. Brand, Staunton, Va., has built a flouring-mill at Brand's Station, Va.

E. W. Pearre, Unionville, Md., remodels his mill to rolls, with 25-barrel capacity.

The LaValle Roller Mills Co., LaValle, Wis., incorporated with \$25,000 capital stock.

Cunningham & Kitzmiller, Camden, Ky., will build a 40-barrel roller flouring mill.

The Diamond Roller Mill, Lake Crystal, Minn., burned, loss \$18,000; no insurance.

J. A. Patterson, miller, Waynesboro, Va., assigned; liabilities \$10,000; assets \$60,000.

The Covington Milling & Elevator Co., Covington, Ky., will build a 30,000-bushel elevator.

F. H. Feavey & Co., Minneapolis, Minn., are building a 1,700,000-bushel elevator at a cost of \$200,000.

John Cudahy and others, in Chicago, Ill., have incorporated The Iowa, Minnesota and Dakota Elevator Co., capital stock \$500,000, to build and operate grain-elevators.

A Milwaukee, Wis., dispatch of July 16 says: An agent of the English syndicate negotiating for the Minneapolis flouring-mills endeavored to secure an option on the Sanderson and the Daisy flour-mills in this city.

The Toronto, Ontario, Canada, Board of Trade makes public the statement that the present indications point to a half crop, or even less, of wheat in Manitoba. The severe drouth that has afflicted Montana and Dakota involves Manitoba and adjoining Canadian territories. There will be much suffering in the drouth district on both sides of the border.

During the past week the Reliance Gauge Co., of Cleveland, Ohio, has received, besides numerous home orders, an order from the Porter Mfg. Co., of Syracuse, N. Y., for six No. 2 "Reliance" safety water-columns, for boilers which they are furnishing to a Cuban customer, and an order from Robert Boker & Co., of Mexico, for a like number. The demand for these safeguards is wide-spread and rapidly increasing as their merits become recognized.

The Reliance Gauge Co., of Cleveland, O., have received through the Variety Iron Works another order for five of the "Reliance" safety water-

columns from the Brooklyn Street Railway Co., for the boilers which they are adding to their Electric-motor plant. They have also recently received second and third orders from the McRein Brewing Co. and the Winidsch-Muhlhauser Brewing Co., of Cincinnati, O. Both of the latter orders came through the Laidlaw and Dunn Co.

Sherman Bros. & Co., Limited, of Buffalo, N. Y., are accused of defrauding their grain customers by mixing inferior grain with good wheat, and of issuing grain certificates for which they had no grain in elevator. Their affairs are badly mixed, and heavy losses will probably fall on the owners of the elevators managed by the firm. S. F. Sherman has returned from a European trip and is trying to straighten out matters. Wilson Sherman, his brother, is away. The case excites deep interest in this city.

"As matters now stand," says the Winnipeg *Commercial*, "we can not look for much more than a half crop average of wheat in Manitoba on an area of 750,000 acres, under the most favorable circumstances in the future, and the only encouraging point is that harvest promises to come so early that there is no danger of any frost damage, and the entire crop will come to market in fine condition. The same unfavorable circumstances in connection with the wheat crop have had their evil effects on barley and oats, only in a marked degree, and a half crop of these grains is considerably above any calculation that can be made, even with the weather made to order from this until harvesting commences."

A Minneapolis dispatch of July 15 says: The rumors about the purchase by British capitalists of a big interest in Minneapolis flour-mills are becoming more definite. Options were given on the Pillsbury and Washburn mills as a result of a thorough examination of the properties by experts. These options expire July 25, and though it was at first believed the deal would go through, there is now understood to be considerable doubt about it. The scheme provides that the property, including mills with a daily capacity of 22,000 barrels, or two thirds of Minneapolis's total capacity, is to be capitalized at \$10,000,000. A controlling interest is to be sold to the English syndicate. C. A. Pillsbury is to be retained as manager, perhaps of the entire business, certainly of the Pillsbury mills.

Among the recent purchasers of the "Patent Friction Covering" for pulleys manufactured by the National Pulley Covering Co., of Baltimore, Md., are: The Geo. T. Smith M. P. Co., Jackson, Mich.; Danville Lumber & Mfg. Co., Danville, Ill.; Georgia Mfg. Co., Athens, Ga.; Marburg Bros., Baltimore, Md.; Texas Tram & Lumber Co., Beaumont, Tex.; Scott Fertilizing Co., Elkton, Md.; Connell Bros., Woodstock, N. B., Canada; Mason & Hamlin Organ and Piano Co., Cambridgeport, Mass.; Manhattan Shirt Mills, Paterson, N. J.; Henry McShane & Co., Baltimore, Md.; The Glendon Co., Boston, Mass. The company have recently appointed McGowen Bros., San Francisco, Cal., their Pacific Coast agents, and the New Orleans Railway and Mill Supply Co., of New Orleans, agents for Louisiana.

BOOKS AND PAMPHLETS.

The revised price-list of the Salem elevator-buckets has been sent out by the manufacturers of those famous wares, Messrs. W. J. Clark & Co., of Salem, Ohio. Address them for a copy of the new list, as all previous lists are annulled.

In the number of *Good Housekeeping* for July 20, just at hand, appears the first chapter of the new series by Catherine Owen, "Helps to Young Housekeepers Over the Hill of Difficulty." Its promise, laying out as it does in a very pleasant way a practical course of instruction on points much neglected by teachers of housekeeping, is most encouraging. There is a very timely paper by Jean Gray on the preparation of salads, and another summery topic discussed by Ruth H. Nettleship is "Cool Homes." Beans are treated by Helen Campbell, who gets the prize for the best paper on the topic. A suggestive paper on "A Summer Vacation" affords a notion how pleasure and profit may be combined. Another timely paper is that on "Pickles" by Mrs. Mary J. Ashton. Indeed all the papers are timely, and there are others as good if not better besides those named, including a taking story about "Jill's Silver Spoons." The general departments are equal to the rest.



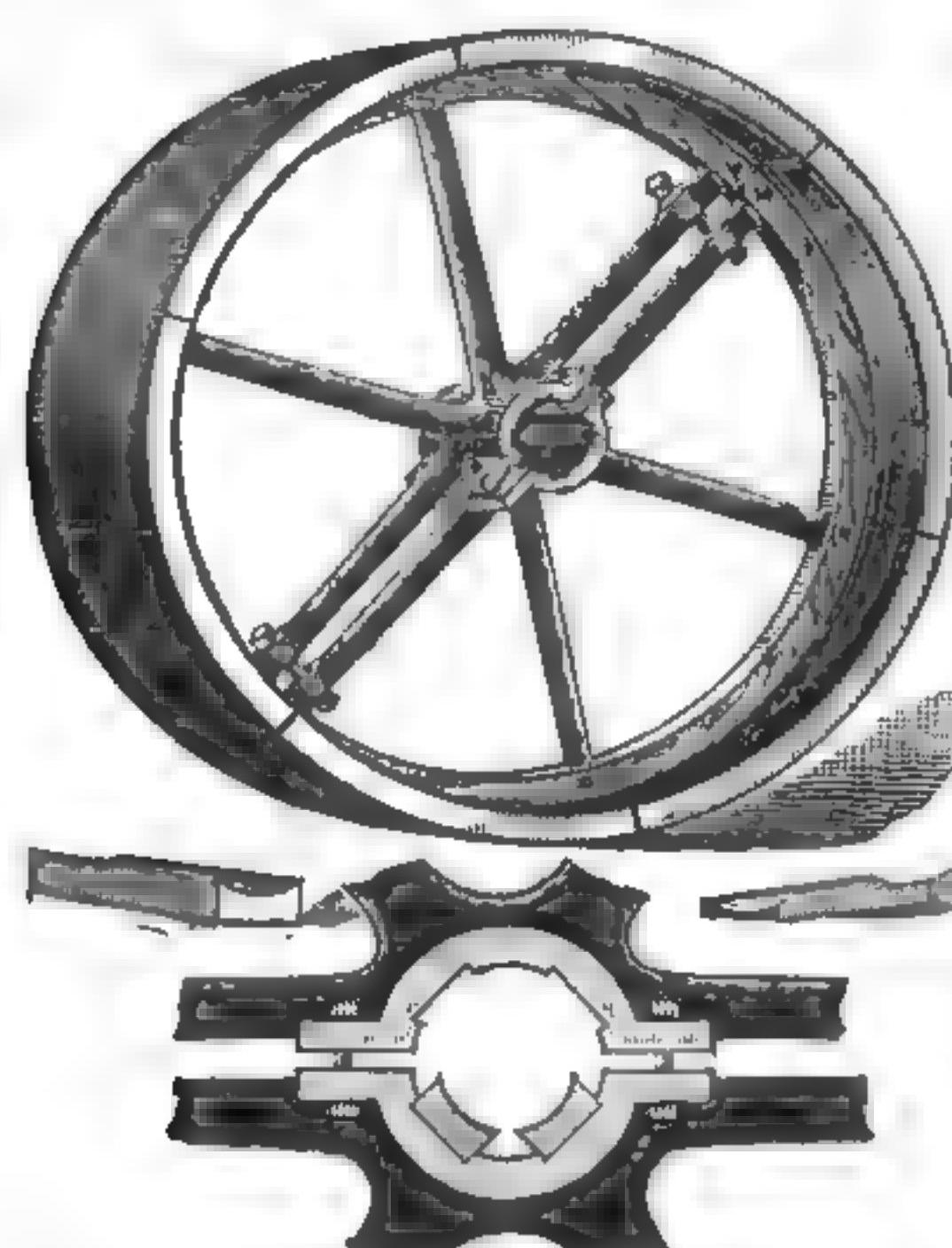
W.A. BINGHAM,
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FLOUR SACKS.
178 Duane Street,
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THE BEST ARE THE CHEAPEST.

MILLERS' FLOUR SACKS A SPECIALTY.

THE PATRONAGE of the MILLING TRADE is MOST RESPECTFULLY SOLICITED.



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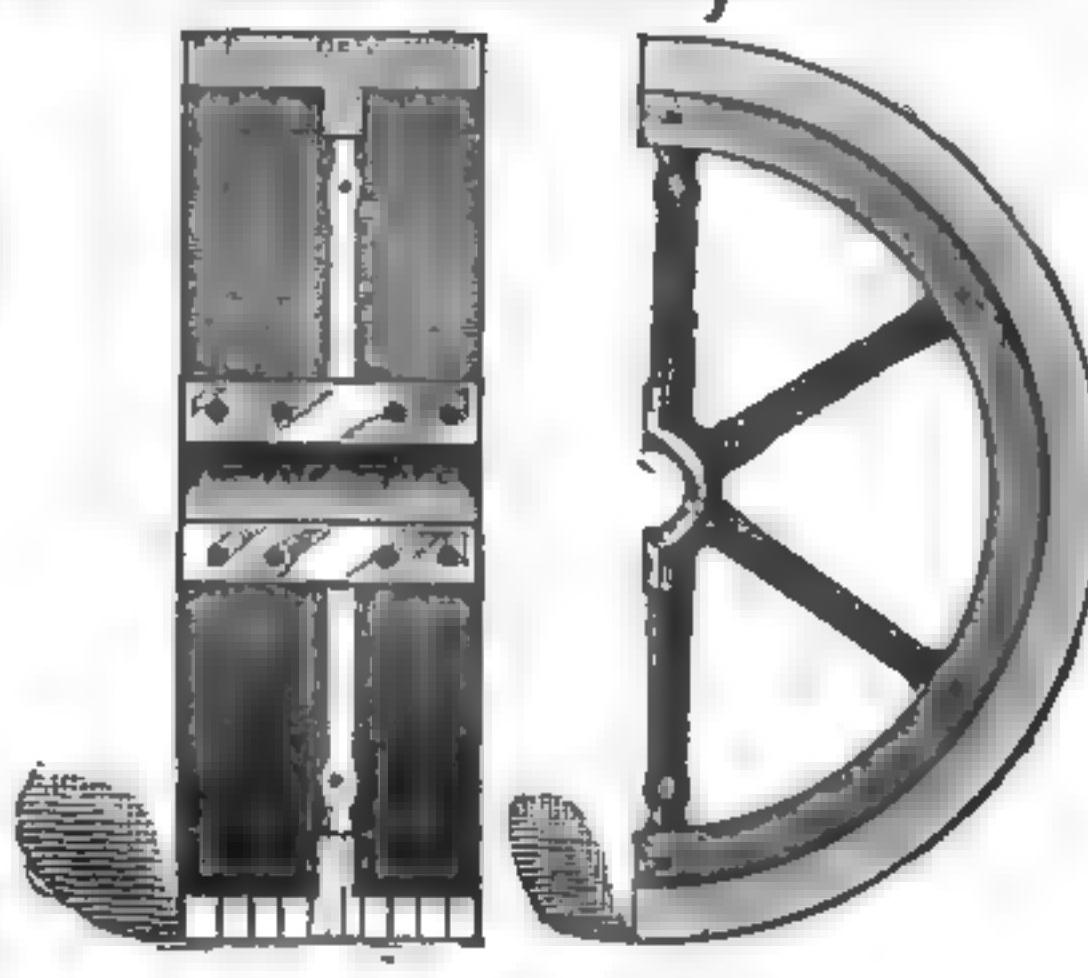
MANUFACTURERS OF PATENT

Wood Split Pulleys

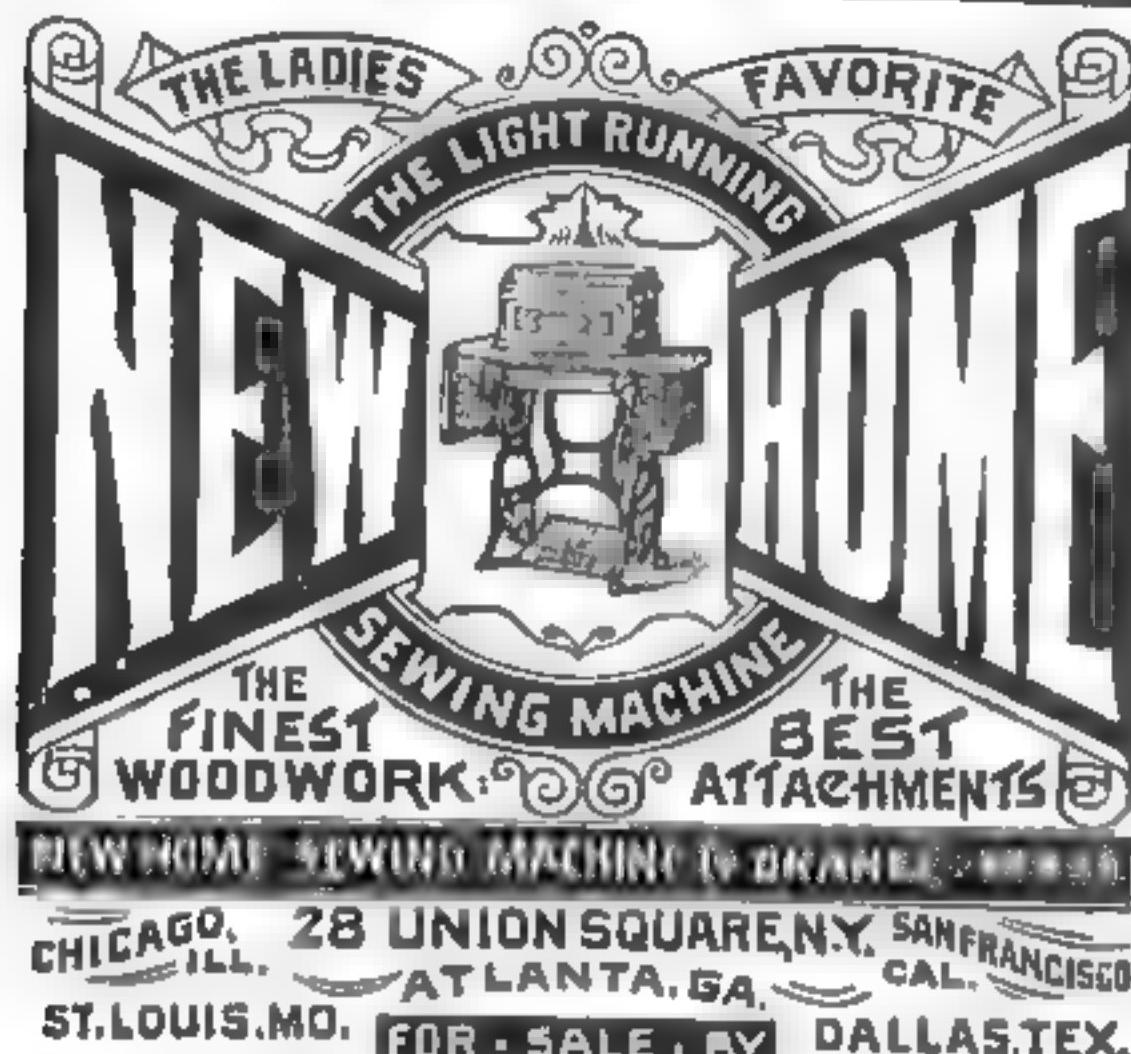
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The Best Pulley on Earth!

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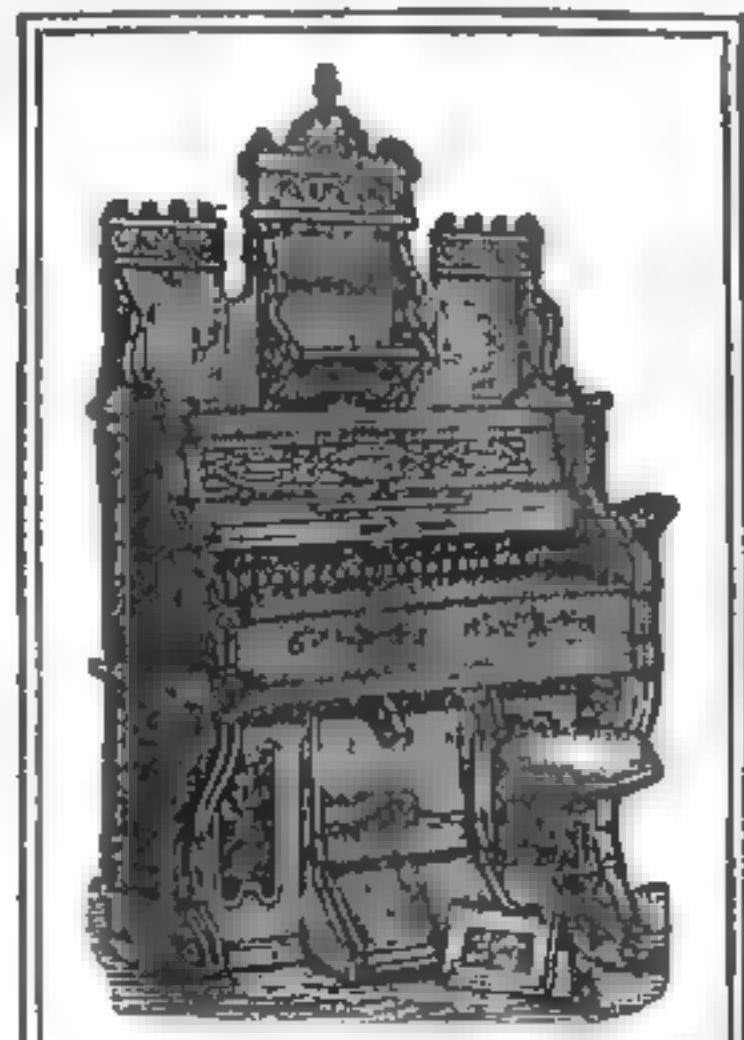


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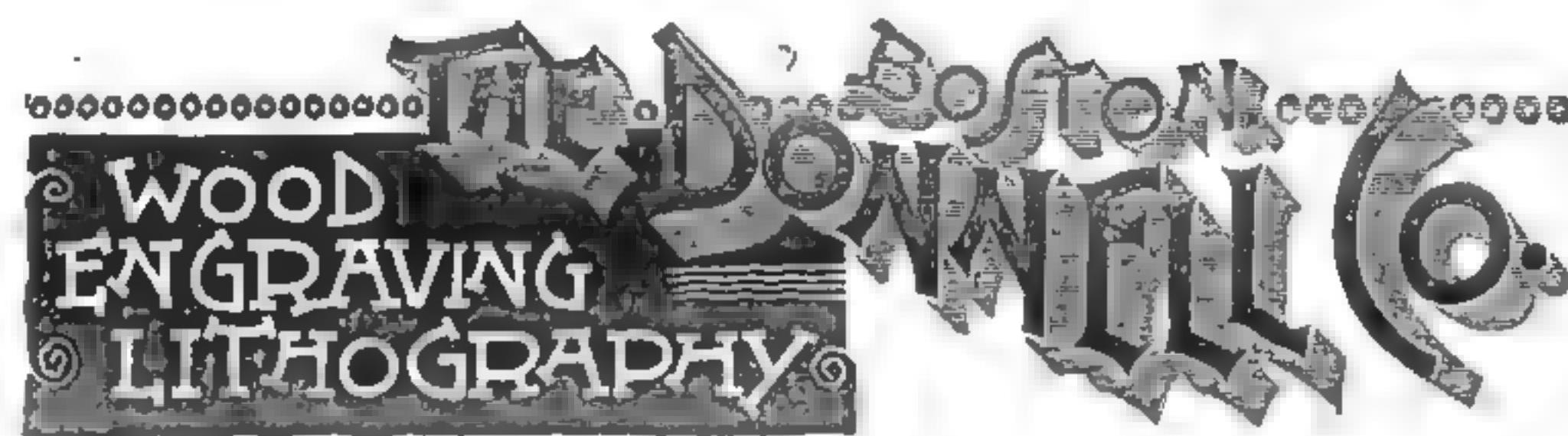


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BOOKWALTER'S MILLWRIGHT & MECHANIC

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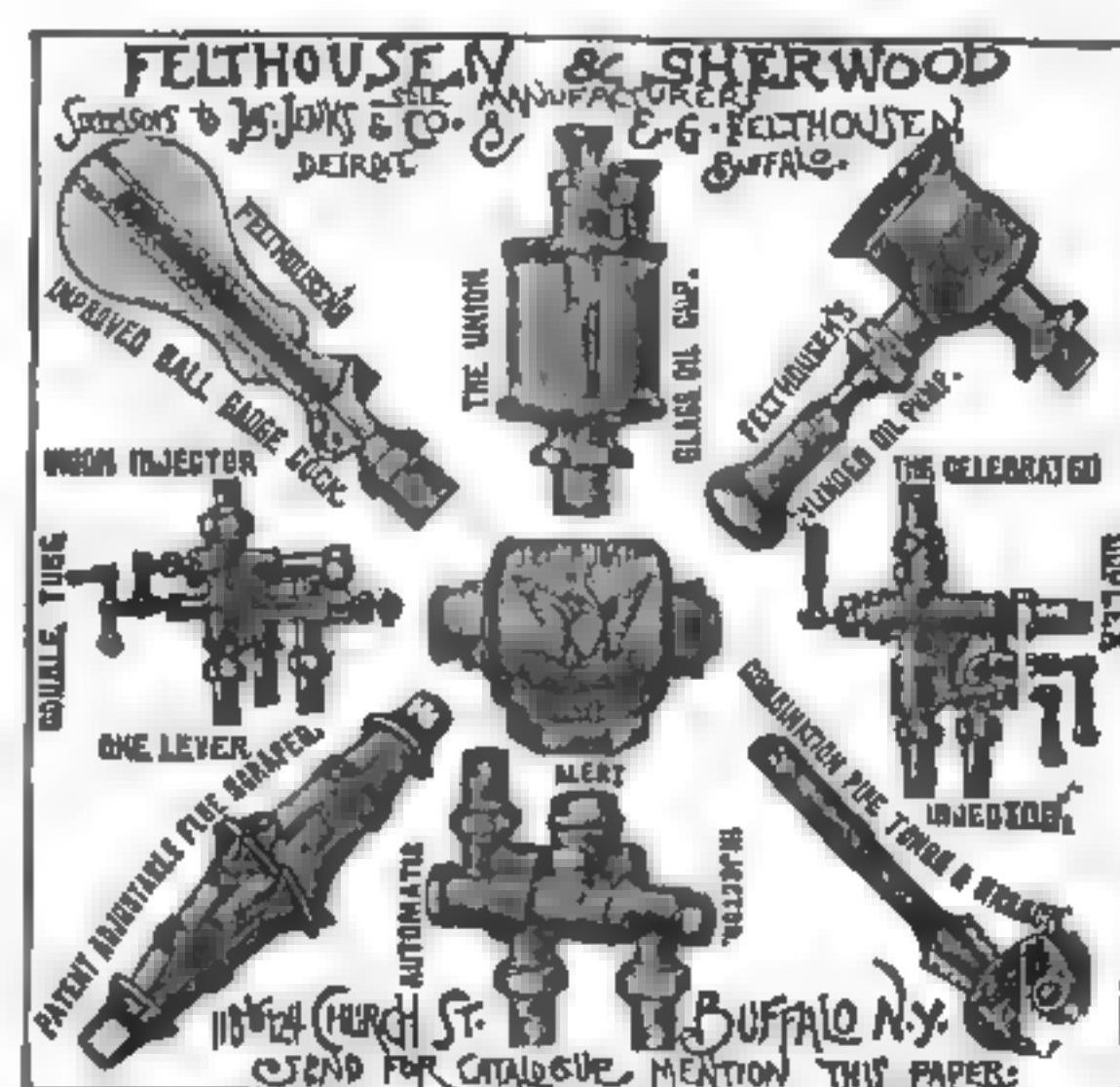
This practical work of 288 pages gives with full illustrations and complete detail how to build or repair all kinds of mill dams.

PRICE FIFTY CENTS.

Or will be sent with a copy of "THE MILLING WORLD" for one year (postage prepaid) for \$1.25.

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BRANCH HOUSE, 1425 EAST MAIN STREET, RICHMOND, VA.

EUROPEAN ECHOES.

SAYS the London "Millers' Gazette" of July 1: "Mr. John M. Case, the well-known American milling expert, was among the visitors at the Royal Show at Windsor last week. He admires the machinery and general make of British machinery, but considers that there are certain points of detail in the British systems of milling which require alteration. He will probably read a paper at the forthcoming Millers' Convention at Paris, if sufficient time can be found for it, which we hope will be the case, for what Mr. Case will have to say will be decidedly worth hearing."

SAMUEL SMITH, of Sheffield, England, writes to the London "Millers' Gazette" as follows: "England is in the unenviable position of needing two-thirds of its bread supply from those countries who 'have bread enough and to spare,' and it is a vital question with the British miller,—shall he keep in a position to manufacture such foreign supply, or shall the foreigner do it for us? Our milling journals keep us well informed of the large numbers of new corn-mills (with all the latest improvements) which our English mill-furnishers are diligently exporting to those countries whence we draw our chief wheat supplies. The February issue of the 'Miller' informs us that one furnisher alone last year exported sixteen such mills, in addition to many more sent out by other milling engineers, and the cry is: Still they go! Our American cousins most industriously circulate their opinion that their surplus wheat should be exported in flour and not in wheat. No doubt other wheat-growing countries who are importing new English-made corn-mills will be ready to imitate so conservative an example. Another fact we can not blink, the large supplies of flour the foreigner continues to pour into our ports is seriously deranging and diminishing our home manufacture. What has the British miller to say to this state of things? Will he not be warned in time, that, unless he battles manfully, and at once, with the conflicting forces opposing him, his craft is in danger? Now, this can only be effectually done by every miller in the Kingdom resolutely putting his shoulder to the wheel of progress, and seriously asking himself what is to be his proper share in this struggle. A workman whose practical knowledge is based on technical knowledge is the highest style of workman, and is a vital necessity in every modern mill in the United Kingdom, if our trade is to support and sustain its wonted enterprise. It is a growing conviction with the Council that this sort of well-qualified work from our employes in the future is of far greater importance than has hitherto presented itself to the milling minds, and should by all means be encouraged and fostered by master-millers, so that our workmen may have the means of advancing abreast of the workmen of other important trades."

A LONDON cablegram of July 16 says that the weekly report from Bombay by cable settles the fact that the Indian wheat crop is going to be no factor at all in the question of the world's food supply this year. English specialists believe the situation a few months hence is going to be fully as bad as it was last year. One or two say they expect it to be worse. Of course the state of European crops is still susceptible of certain fluctuations and can not be accurately mapped out until the annual seed fair at Vienna, which, owing to the general anxiety this year, has been advanced in date to August 24; but while climatic contingencies may injure good crops, they will be able to do little to improve those already doomed, and the condition in October is more likely to be worse than better. The demand for wheat in the big purchasing countries of Europe bids fair to be smaller than usual. England and France promise harvests considerably better than last year. As the fields and stacks now stand, the yield of these two countries is expected to be 40,000,000 bushels in excess of last year. Spain also will be above the average, and Italy only a trifle under. Germany, east of the tenth parallel, is almost as good and perhaps the present weather will make her quite as good, as last year. But there the favorable picture stops. Indeed,

this tenth parallel may be taken as fairly dividing the good from the bad. East of that line wheat crops have gone all to pieces. Two great exporting countries, Russia and Austro-Hungary, will this year find it difficult to feed themselves. Russia, which had big harvests the last two years and forced the market to get rid of all its grain in order to float loans, now confronts a rather serious situation. Her big granaries, like those at Odessa, have never before been so empty of wheat, and the present crop in many large districts is a complete failure. The long drought and then the cyclonic storms which destroyed the wheat and oats prospects in Russia have been the same for wheat, rye and barley in Austro-Hungary, Roumania and Eastern Germany. The shortage over here will be so great that the market will be more at the mercy of the United States than ever before.

MIDDINGS PURIFIER POETRY.

SMITH VERSUS HAGGENMACHER.

Haggenmacher made a machine,
"Plansichter" was its name;
'Twas called the "greatest thing" e'er seen,
And world-wide was its fame.

'Twas puffed at morn, at noon, at night,
'Twas puffed all hours between,
And every miller heard a sight
About that air machine.

The German journals published views
And diagrams in scores,
With dusty leaders to peruse,
That filled all mills with snores.

The British journals followed suit
With cuts and leaders long,
And surely they did quite out-toot
The German tooters strong.

The Haggenmacher sift-machine
Would "mark an epoch great,"
Would knock all other sifters green,
Would milling renovate.

Meanwhile, in Jackson, George T. Smith
Was taking it all in.
"I think I'll try this German myth,"
He said with quiet grin.

So off he packed by ship and train
A challenge to the fray,
And roped a ring in far Louvain,
And named the battle day.

The Haggenmacher myth was there,
"Plansichter" of wide fame,
And Smith's Inter-Elevator rare
Appeared with modest name.

The "mill" was called, the umpires grave
Watched every "round" with care;
Smith with "Plansichter" mopped the pave,
With 8 per cent. to spare!

The German sifter took the dust
Behind the great Smith reel,
And ne'er again itself 'twill trust
Before the Yankee steel.

No "epoch" makes "Plansichter" now,
No "revolution" great,
It must sit back, with humbled brow,
And second fiddle rate!

Carl Haggenmacher now is glum,
Great gobs of grief he swallows,
While George T. beats in glee his drum—
Smith leads, but never follows!

Duluth, Minnesota, July 13, 1889.

Bang.

MILLING PATENTS.

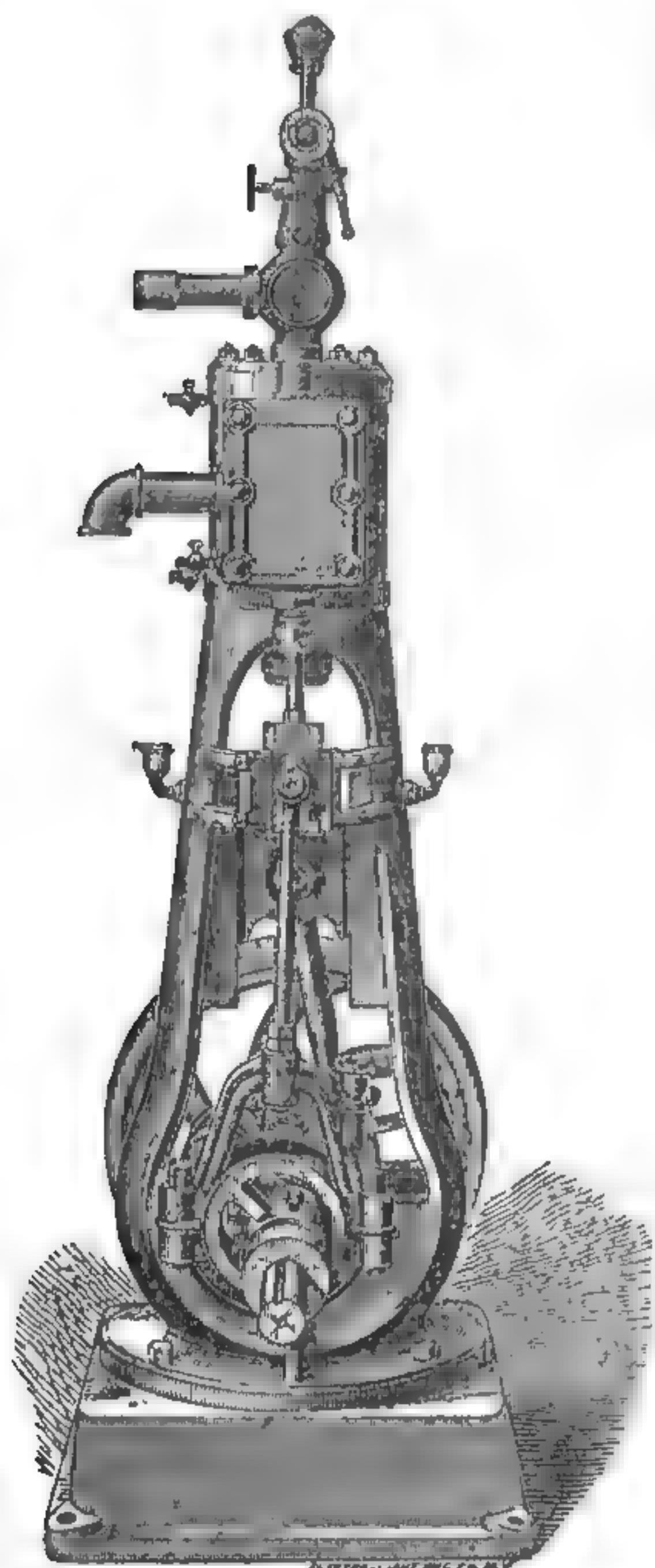
Among the patents granted July 9, 1889, are following:
Fritz Susemiehl, Davenport, Ia., No. 406,486, a steeping-tub for steeping barley or other grains.

Frank C. Hall, Philadelphia, No. 406,522, a grinding-mill.
John H. Day, Albany, N. Y., No. 406,631, a dry-flour paste, a new article of manufacture resulting from evaporating the moisture from liquid flour paste composed of flour, glue and alcohol, and grinding the residue to a fine powder.

Robert Kent, Brooklyn, N.Y., No. 406,651, a grinding-mill.
Horace M. Fulwider, Redmon, Ill., No. 406,722, a grain-weighing machine.

Jos. Schweitzer, Paris, France, No. 406,779, a grinding-mill.

AUTOMATIC VERTICAL ENGINES



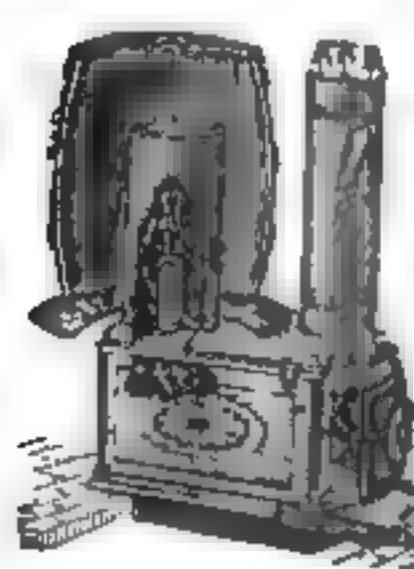
Especially adapted for Small Electric Light Plants.
Perfect Regulation. Reversible Link Motion for Marine Use. Five to Fifteen Horse Power. Also manufacturers of

Lathes and Special Tools

Metal Patterns, Models and Machinery Built to Order.
Send for Prices and Specifications.

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ERIE, - - PENN.



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PATENT
BARREL HEATER.**

For all kinds of coverage. Thousands in use in all parts of the U.S. Send for Circular.

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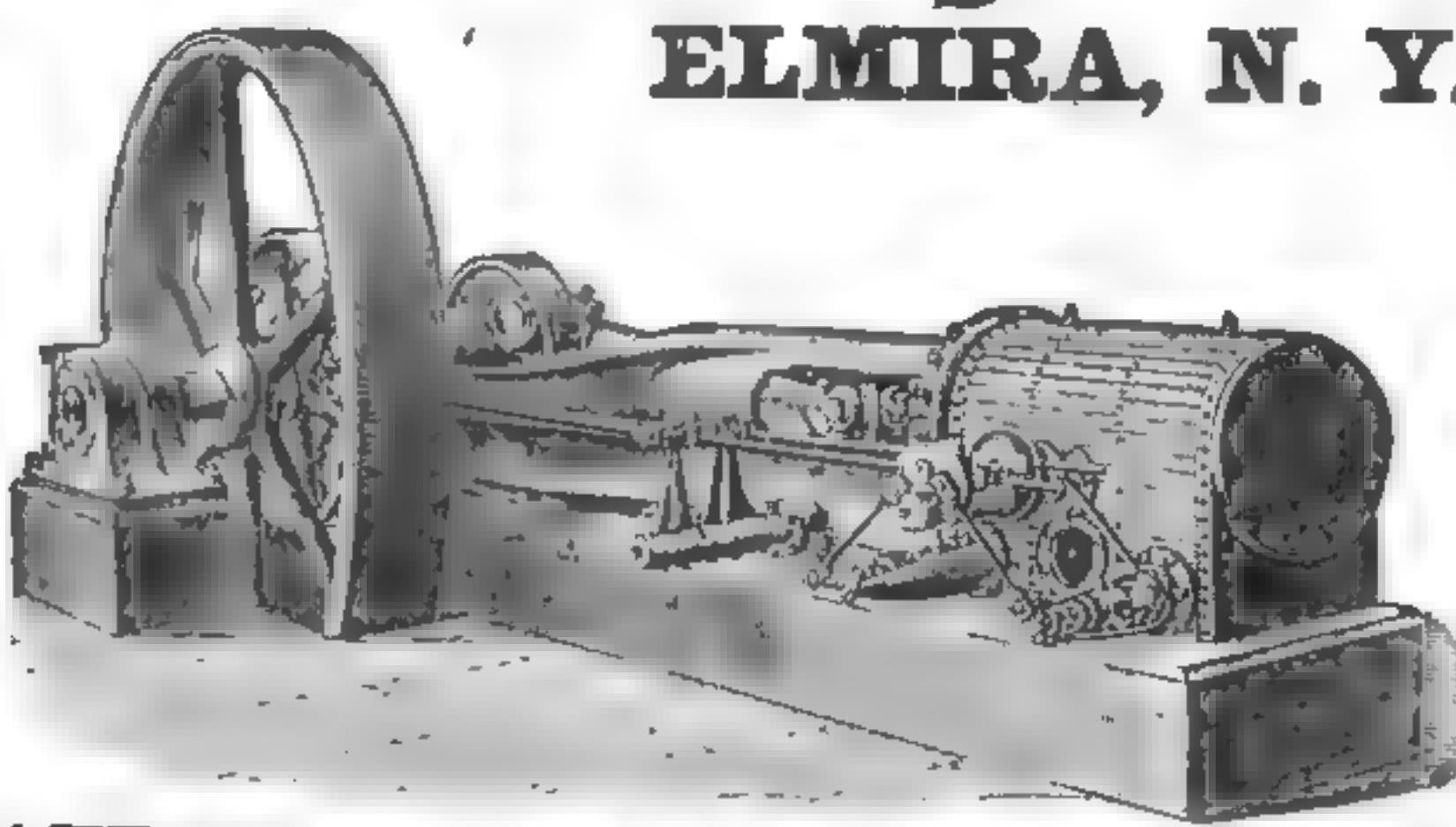
PAYNE HIGH SPEED CORLISS ENGINE

SHAFT GOVERNOR COMBINED WITH CORLISS WRIST-PLATE.

ECONOMY OF FUEL.

REGULATION EQUAL TO ANYTHING IN USE.

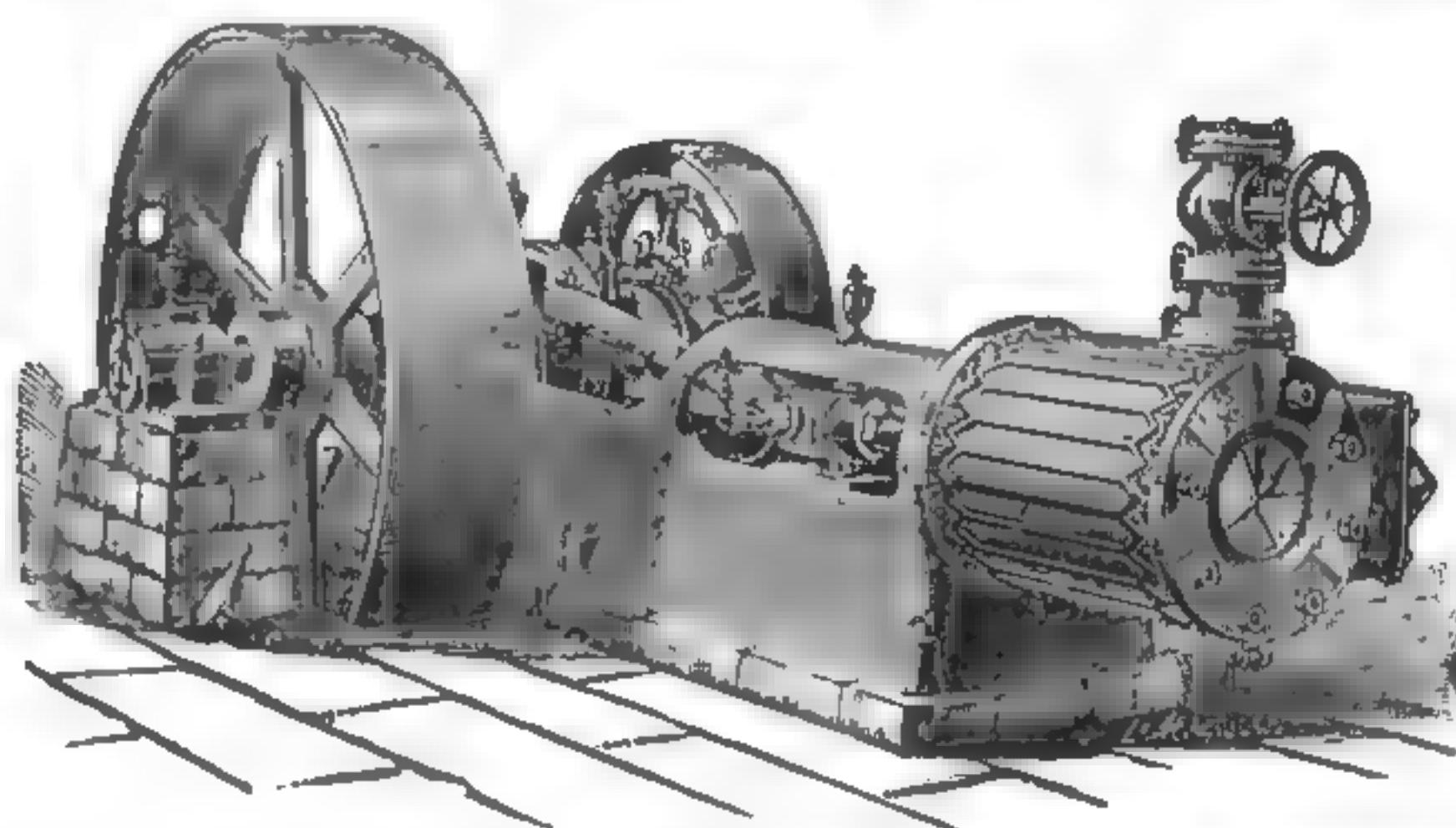
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Especially Adapted to Electric Lighting and
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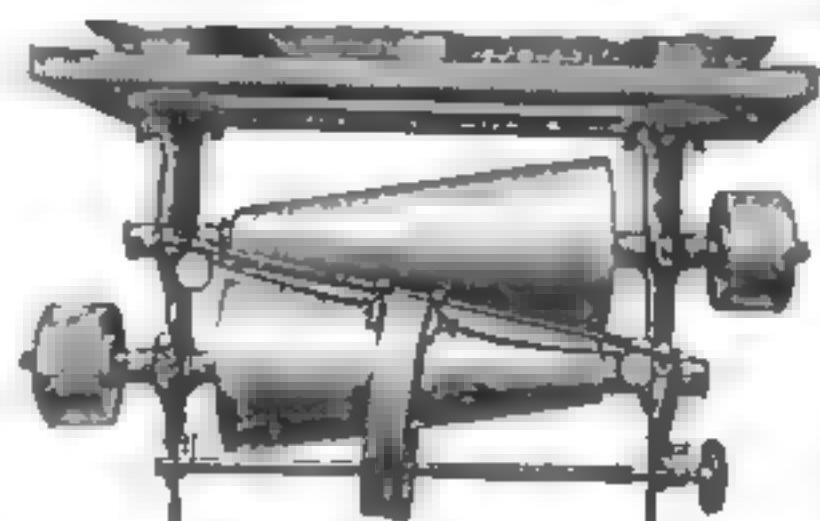
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VALLEY IRON WORKS, WILLIAMSPORT, PENN.

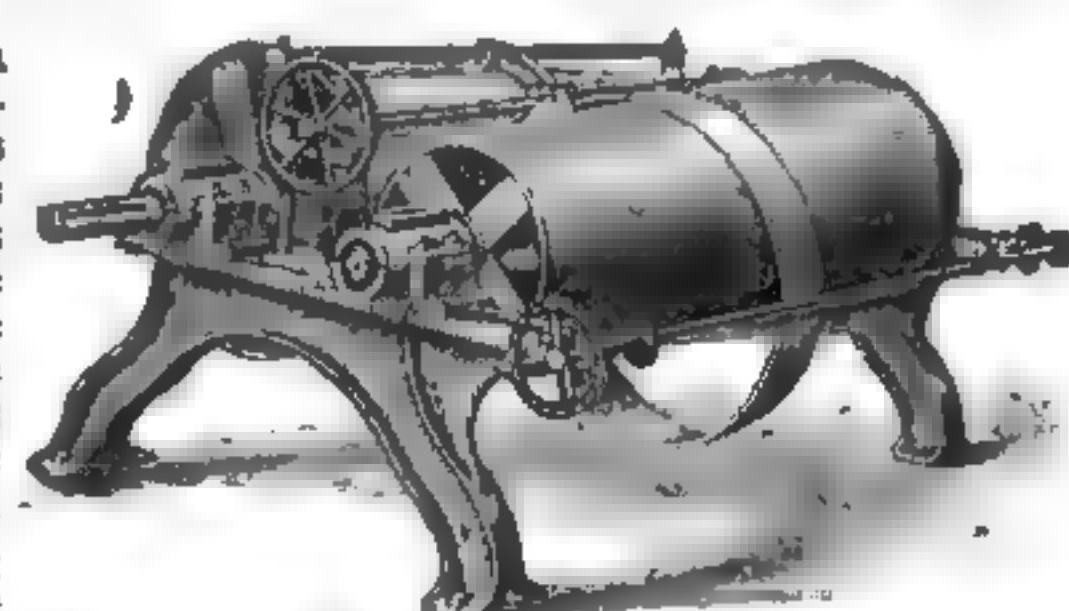
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THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."



This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is fluctuating. All sizes made from $\frac{1}{2}$ Horse Power to 60 Horse Power. SEND FOR ILLUSTRATED CATALOGUE.



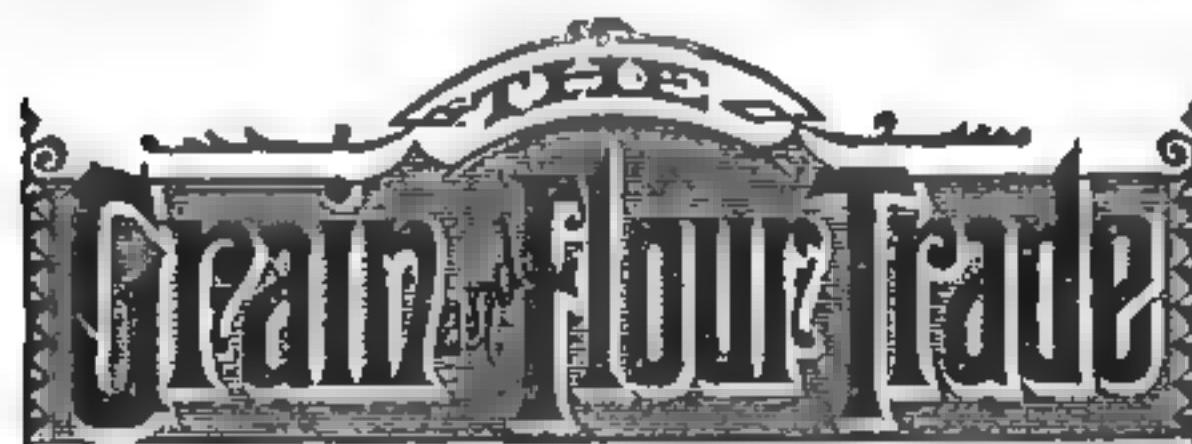
EVANS FRICTION CONE CO., 85 Water St., BOSTON.



KEEP YOUR BELTS FROM SLIPPING

And Save Your Power by Using FRICTION COVERING for Pulleys. Agents Wanted. Satisfaction Guaranteed. Easily Applied. No Rivets. Effective.

NATIONAL PULLEY COVERING CO., BALTIMORE, MD.



OFFICE OF THE MILLING WORLD,
BUFFALO, N. Y., July 20, 1889.

Friday of last week brought dull and weak corn and wheat markets on bear hammering, and active and lower oats markets on bull liquidation. The movement of new wheat in the West was used as a bear influence. July wheat closed at 85½c. Options only 1,600,000 bushels. July corn closed at 42½c. and oats at 26½c. Wheat flour was quiet with lower wheat, and exporters' limits were reduced 12 cents on the whole list. The other lines were featureless.

Friday brought better cables and firmer, but dull, markets. Trade was very small. July wheat closed at 86c. Options 900,000 bushels. July corn closed at 42½c. and oats at 27c. Wheat flour ruled dull and unchanged. Trade light. The minor lines were quiet.

Monday brought weaker, lower and unsettled markets for wheat on the free movement of the new crop. July wheat closed at 85c. Options 2,000,000 bushels. Exporters took some grain for Europe. July corn closed at 42½c. and oats at 27c. Wheat flour was lower to sell under free offerings of new winters to arrive at 25c. less than spot prices all around of old. As a consequence old flour was held 5@10c. easier to sell. The new samples were rather too damp to sell well, but their presence in the market was felt. New patent wictors to arrive were offered at \$5. The other lines were quiet and unchanged. General trade was light. The visible supply in the United States was as follows:

	1889.	1888.	1887.
	July 13.	July 14.	July 16.
Wheat.....	12,711,165	22,418,268	31,496,898
Corn.....	8,950,606	9,332,091	8,674,259
Oats.....	5,068,713	3,468,325	2,075,165
Rye.....	806,601	143,477	218,692
Barley.....	377,951	149,365	180,177

On Tuesday the markets were excited and higher on the crop reports at home and shortage reports from Europe and Asia. July wheat closed at 86½c. Options 3,250,000 bushels. Exporters took several loads for the United Kingdom. July corn closed at 42½c., with moderate sales. July oats closed at 27½c. Wheat flour was dull and generally unchanged, the slight changes being in buyers' favor. The other lines were featureless. The general tone during the day was decidedly bullish.

On Wednesday the wheat market was higher on light offerings and short and foreign buying. Chicago dispatches stated that the wheat crop of Oregon and Washington will not be over half the estimates of six weeks ago. The Government report showed July 1st a falling off in condition of 12 per cent. in the former and 19 in the latter during June. July wheat opened at 87½c. and closed at 88½c. Options 3,400,000 bushels. Exporters took some loads. July corn firmed up to 43c. at closing, and oats closed at 27½c. Rye grain was nominally 49c 50c for car track lots, and 52c. for State or Western afloat. Malt was steady and dull at the following figures: Canada 95c for country to \$1.05 for city made; six-rowed State 85@92½c.; four-rowed do 80@87c.; Western 60@85. Mill-feed was strong and active at the following figures: 40-lbs 62½@65c.; 60-lbs 60c.; 80-lbs 60@62½c.; 100-lbs and sharps 75@80c. Other kinds quiet.

Wheat flour was held steadily with higher wheat. English inquiries for new flour were reported. Sales were not large. The flour quotations were as follows:

SPRING FLOUR.

	Sacks.	Barrels.
No grade.....	\$1.75@1.90	\$....@....
Fine.....	2.10@2.20	2.25@2.60

Superfine	2.30@2.60	2.70@3.10
Extra No. 2.....	2.95@3.25	3.15@3.40
Extra No. 1.....	3.40@3.80	3.65@4.30
Clear	3.50@3.80	3.80@4.05
Straight	4.30@4.80	4.55@5.30
Patent	5.55@6.05	5.55@6.40

WINTER FLOUR.

	Sacks.	Barrels.
No grade.....	\$1.90@2.00	\$....@....
Fine	2.40@2.50	2.50@2.65
Superfine	2.60@2.90	2.90@3.15
Extra No. 2.....	3.15@3.40	3.45@3.65
Extra No. 1.....	3.65@4.55	3.85@5.05
Clear	3.80@4.30	4.20@4.65
Straight	4.45@4.80	4.70@5.05
Patent	4.65@4.95	5.15@5.55

CITY MILLS.

W. I. grades.....	\$4.45@4.70
Low grades.....	2.55@2.80
Patents.....	5.55@6.00

Rye flour was dull at \$2.75@3.00. Corn products were higher at the following quotations: Coarse 82@84c; fine yellow 95c@\$1; fine white \$1.00@1.10; Brandywine \$2.75; Southern and Western \$2.60@2.75; grits \$2.60@2.70; hominy grits \$2.70@2.75 in barrels, \$1.20 in sacks; granulated brewers' meal \$1.20 per 100 in sacks. Corn flour \$2@3 for bbls; chops 60@65c.

On Thursday the markets were less strong. July wheat closed at 87½c. Options 3,312,000 bushels. July corn closed at 43½c. and oats at 27½c. Wheat flour was active and unchanged, but steady in price. The minor lines were featureless.

BUFFALO MARKETS.

WHEAT—There was only a fair inquiry for spring wheat to-day, but holders are firm in their belief that it will go up before the week closes, and they will not go down to the prices bid. Old No. 1 hard remains firm at 44c. over Chicago July and new No. 1 at 27½c. over ½c. higher than yesterday. Old No. 1 Northern was quoted at \$1.52; No. 2 do at 9c.; No. 3 do at 9c.; and No. 2 spring at 87c. Crop reports from the wheat-growing sections are more encouraging, and it is believed by all local dealers that the wheat market will take a sudden turn and go higher before the week is out. At the close old No. 1 hard still remained firm at \$1.24½; new No. 1 do at \$1.08; and No. 1 northern at \$1.02. Winter wheat in light demand, but market firm; 2,500 bu No. 1 white Oregon sold at 88c. in store; 2,000 bu No. 3 red at 78c; and 8 car-loads No. 3 do at 92½c on track. There was no No. 1 white Michigan in the market. **CORN**—In fair demand and scarce, but market higher. No. 2 yellow was quoted at 40½c; and No. 2 corn at 40@40½c. At the close 1,700 bu No. 2 corn sold at 40c. **OATS**—In slow demand and market steady; No. 2 white was offered at 31½c in store; track receipts at 82½c do; No. 3 white at 80½c; No. 2 mixed at 27c in store; and white state oats, from farmer's wagon, at 85@86c. **CANAL FREIGHTS**—Firm. Rates of freight on wheat to New York 8½c, on corn 8½c, on oats 2½c, and on rye 8½c; lumber rates to New York \$2.25, to Albany \$1.75. **RYE**—Dull at 47½@48c for No. 2 Western. **FLOUR**—City ground—Patent spring, \$6.00@6.25; straight Duluth spring, \$5.75@6.00; bakers' spring, best, \$5.50@5.75; do ry: mixture, \$4.75@5.00; patent winter, \$6.00@6.25; straight winter, \$5.00@5.25; clear winter \$4.75@5.00; cracker, \$4.75@5.00; graham \$4.75@5.00; low grade, \$3.00@4.00; rye, \$3.25@3.50 per bbl. **OATMEAL**—Akron, \$6.00; Western \$5.75 per bbl; rolled oats, in cases, 73 lbs \$3.25. **CORNMEAL**—Coarse, 80@85c; fine, 85@90c; granulated, \$1.50 per cwt.

The agricultural statistics of Tasmania, complete for all but two districts, show that in most crops that island is more prolific than the best districts of the neighboring continent of Australia. The report shows a large increase in the total and average yield compared with last year. The following are the results: Wheat, total production, 782,691 bushels, average 18.89 bushels to the acre; barley 905,551 bushels, average 13.87; oats 888,844 bushels, average 27.28. The average yield of wheat for the previous year was 16.42; oats, 18.87.

A report from Odessa, Russia, June 27, says: "The winter-sown grain continues to promise very unfavorably, and we can only expect very small supplies of soft wheat from Bessarabia and Podolia next season. Rye has also suffered

seriously. Last year at this time the harvest had already commenced, and both quantity and quality could be fairly estimated; this year the plant is quite fifteen days behind its usual growth. The Colza and Navettes crops are positively lost; maize has benefited considerably from the recent rain. Spring wheat and barley vary very much, according to locality. In certain districts the drought has caused irreparable injury, in others the spring sowings were only partly compromised and have reaped much benefit from the late rains; both spring wheat and barley can only yield mediocre crops."

Says the Cincinnati *Price Current*: The wheat crop year is generally reckoned in this country as beginning and ending with July 1. For the year now closed the exports from the United States have been about 89,000,000 bushels of wheat and flour. The comparison with previous years is approximately as follows, for a period of ten years:

	Wheat, bushels.	Flours as bushels.	Total bushels.
1888-9.....	48,000,000	41,000,000	89,000,000
1887-8.....	65,789,000	53,836,000	119,625,000
1886-7.....	101,972,000	51,833,000	153,805,000
1885-6.....	57,759,000	38,806,000	94,565,000
1884-5.....	84,654,000	47,916,000	132,570,000
1883-4.....	70,349,000	41,185,000	111,534,000
1882-3.....	106,386,000	41,425,000	147,811,000
1881-2.....	95,372,000	26,620,000	121,892,000
1880-1.....	150,565,000	35,756,000	186,321,000
1879-80.....	153,253,000	27,051,000	180,304,000

This exhibit indicates that the aggregate exports have been about 1,337,000,000 bushels, wheat and flour, for the past ten years. The production during this time, officially estimated, has been 4,454,000,000 bushels of wheat. The imports have been a little in excess of 4,000,000 bushels. The indicated domestic consumption for all purposes has been 3,121,000,000 bushels. Of this about 530,000,000 bushels went for seeding, leaving 2,591,000,000 bushels for all other purposes. These computations ignore any variation in surplus supplies at the beginning and ending of the ten-year period, which in fact are now evidently about 25,000,000 bushels smaller than ten years ago, and smaller even than the low point in 1882, which has been regarded as practically representing the minimum point in reserves. The remaining supplies in the country are about 25,000,000 bushels smaller than a year ago. The incoming crop of wheat in the United States is not likely, from the presents indications, to exceed last year's production more than 70,000,000 bushels, and the popular calculation seems to be 60,000,000. If it be 70,000,000, and reserves are 25,000,000 bushels lower than a year ago, the real gain will be 45,000,000 bushels, compared with a year ago. With an allowance for enlarging consumption, the amount of gain in available surplus, on this basis, will be less than 40,000,000 bushels, making an exportable quantity of about 130,000,000 bushels, by reducing supplies a year hence to as low a point as they now are.

The grain-elevator men in Minneapolis are much put out because of the action of their City Assessor in assessing their wheat, amounting to 8,000,000 bushels. In past years this wheat has never been assessed. The elevator men claim that the wheat receipts change hands so often that it is impossible to say to whom the wheat belongs after the receipt has passed out of their hands. They are anxious to get the Board of Equalization to look at the question in the same light as they do, but the Board professes to have no disposition to do any thing.

"The deficient flour producing qualities of this season's English wheat," says Beerbohm, "which may safely be assumed to be 12½ per cent, compared with last year, make the consumption of foreign wheat larger than usual."



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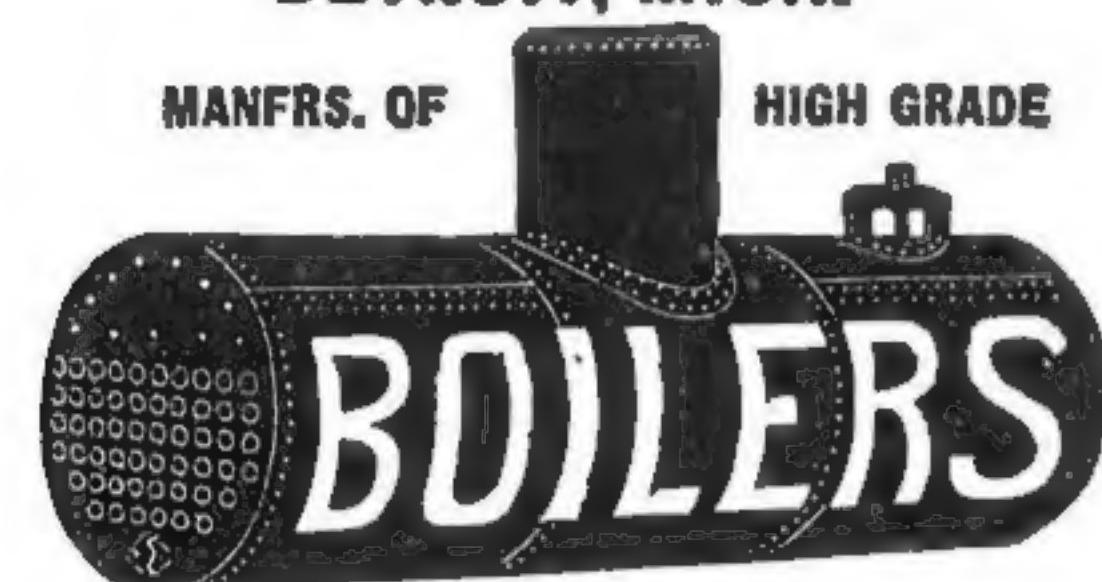
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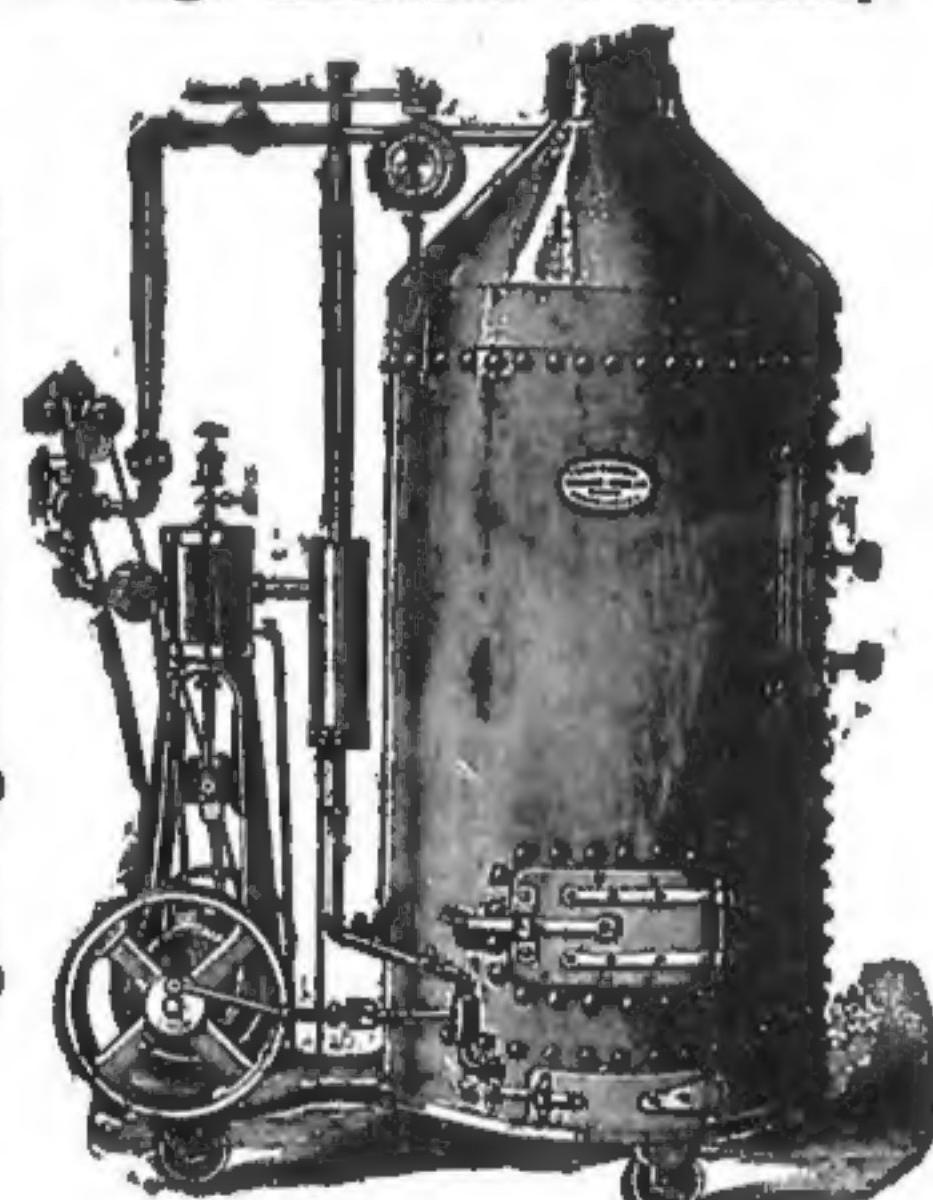
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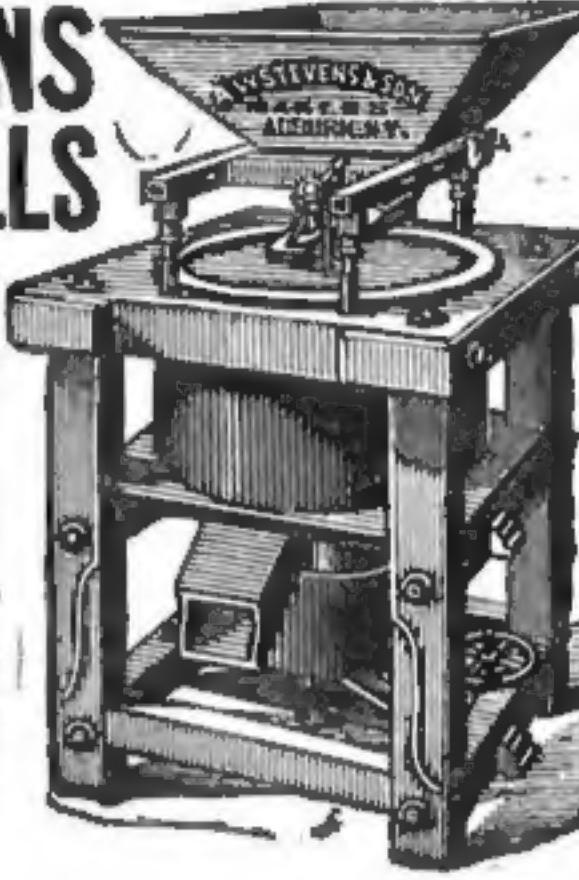
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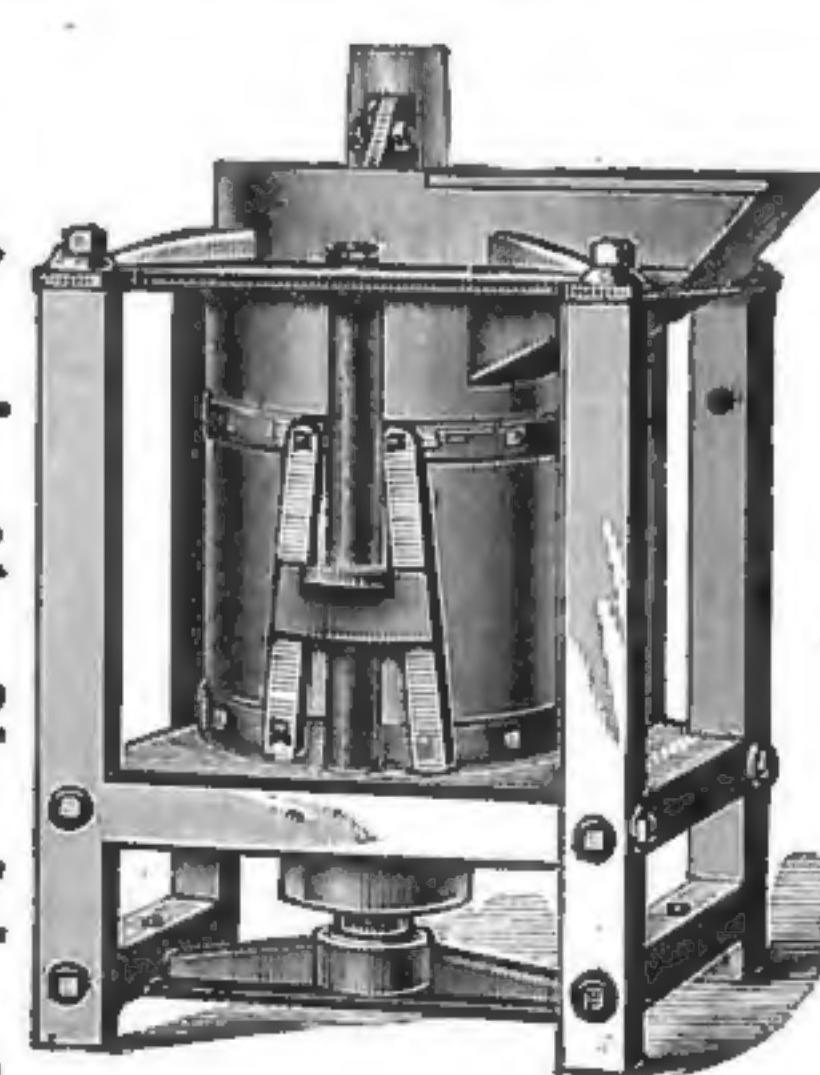
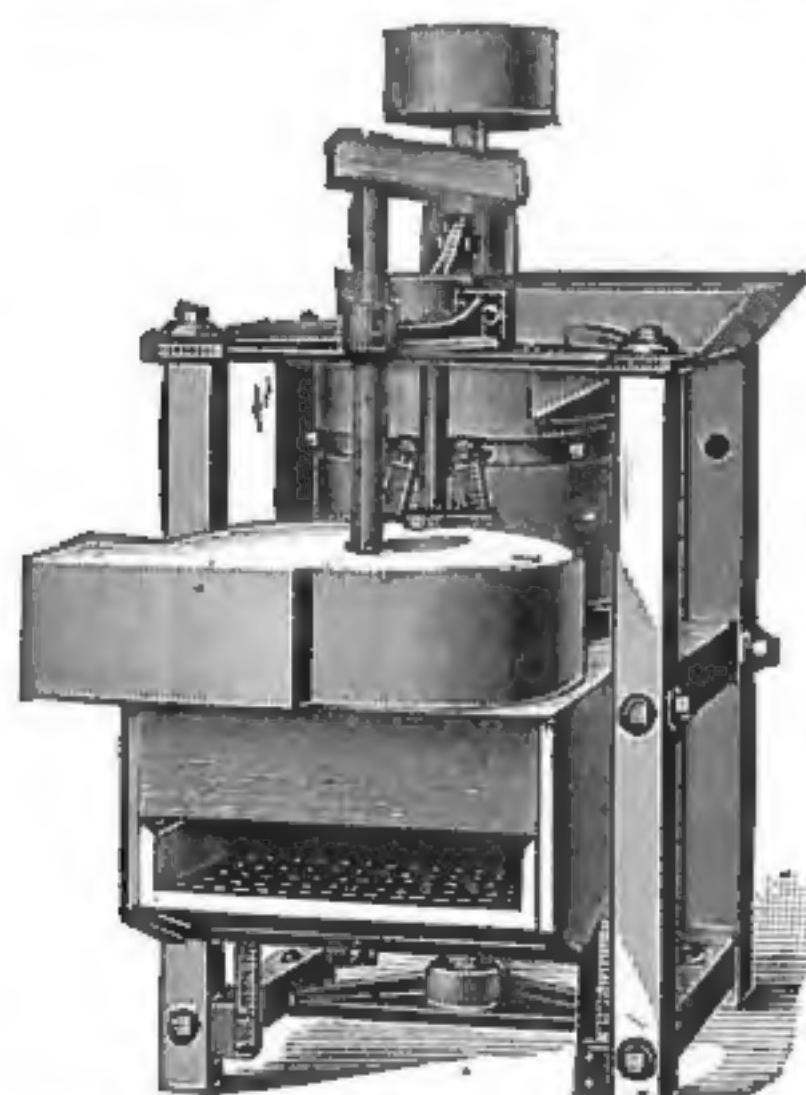
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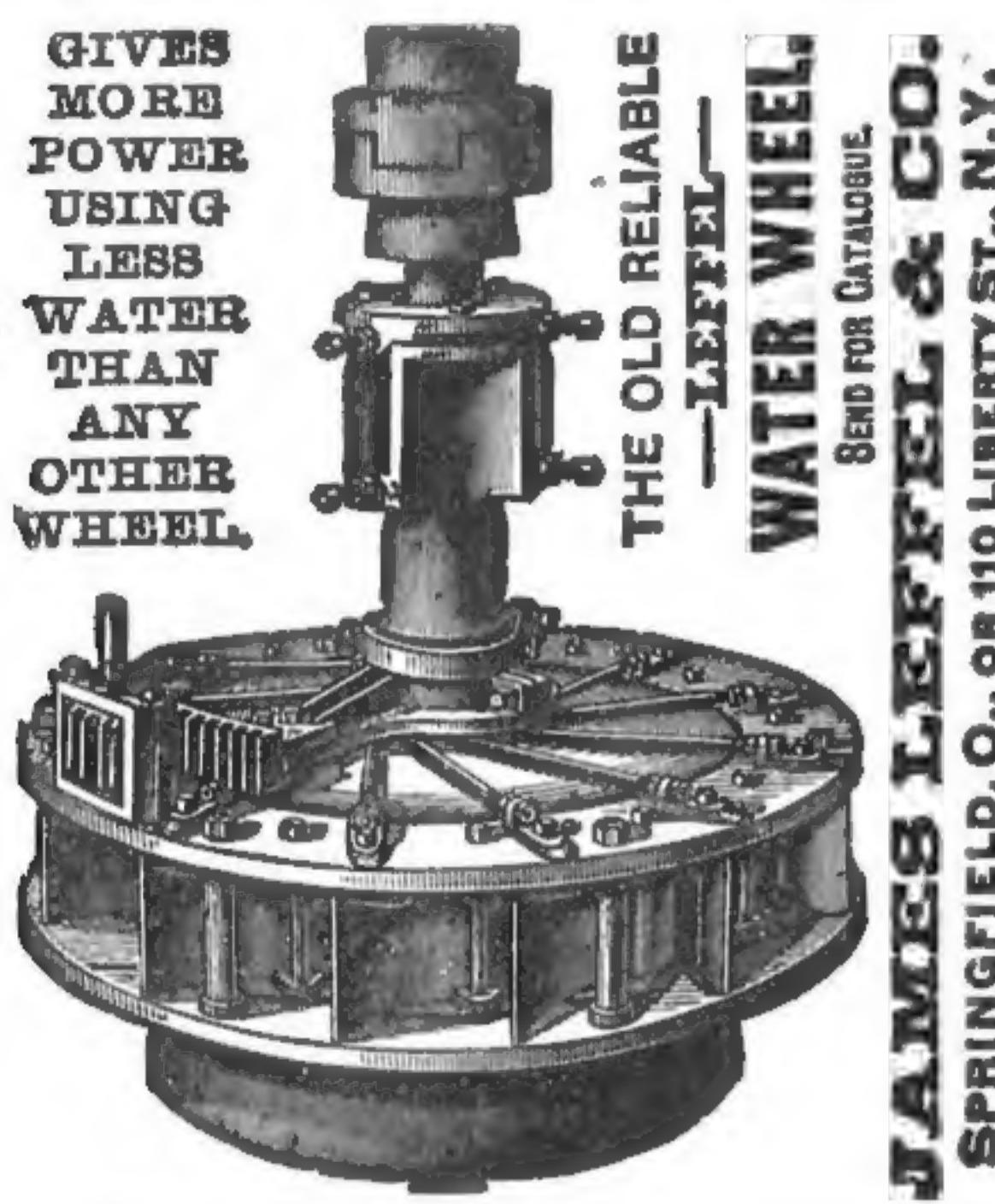
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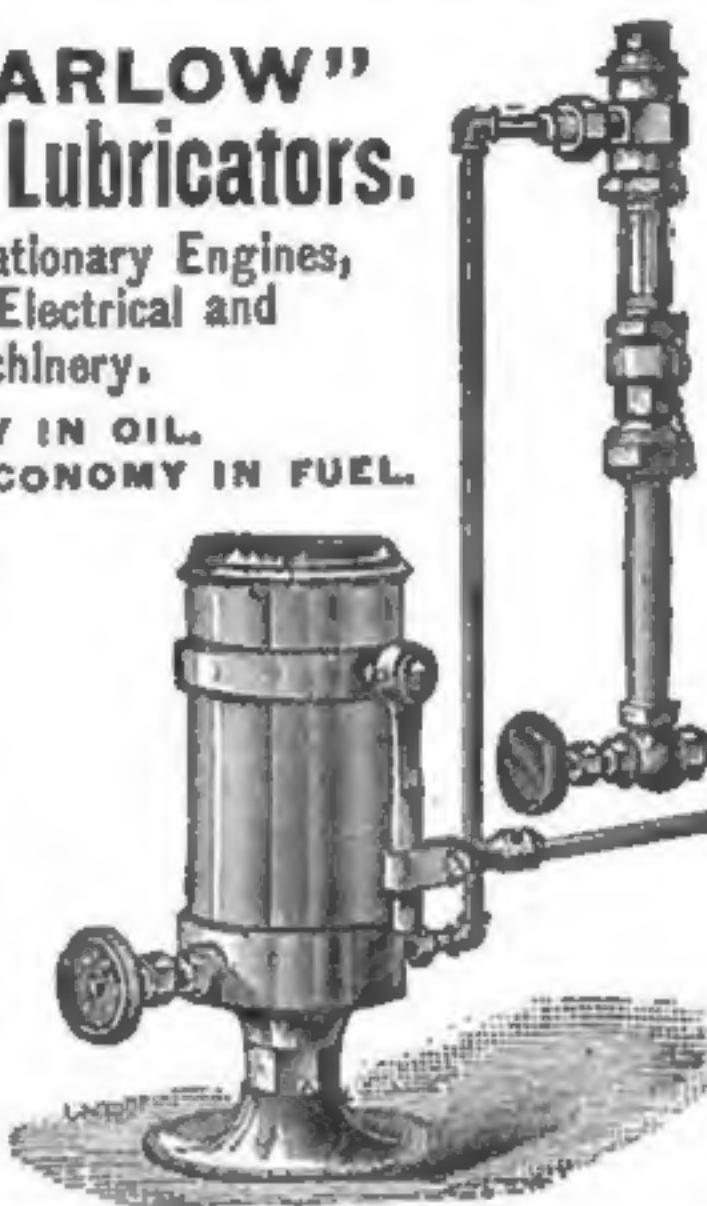
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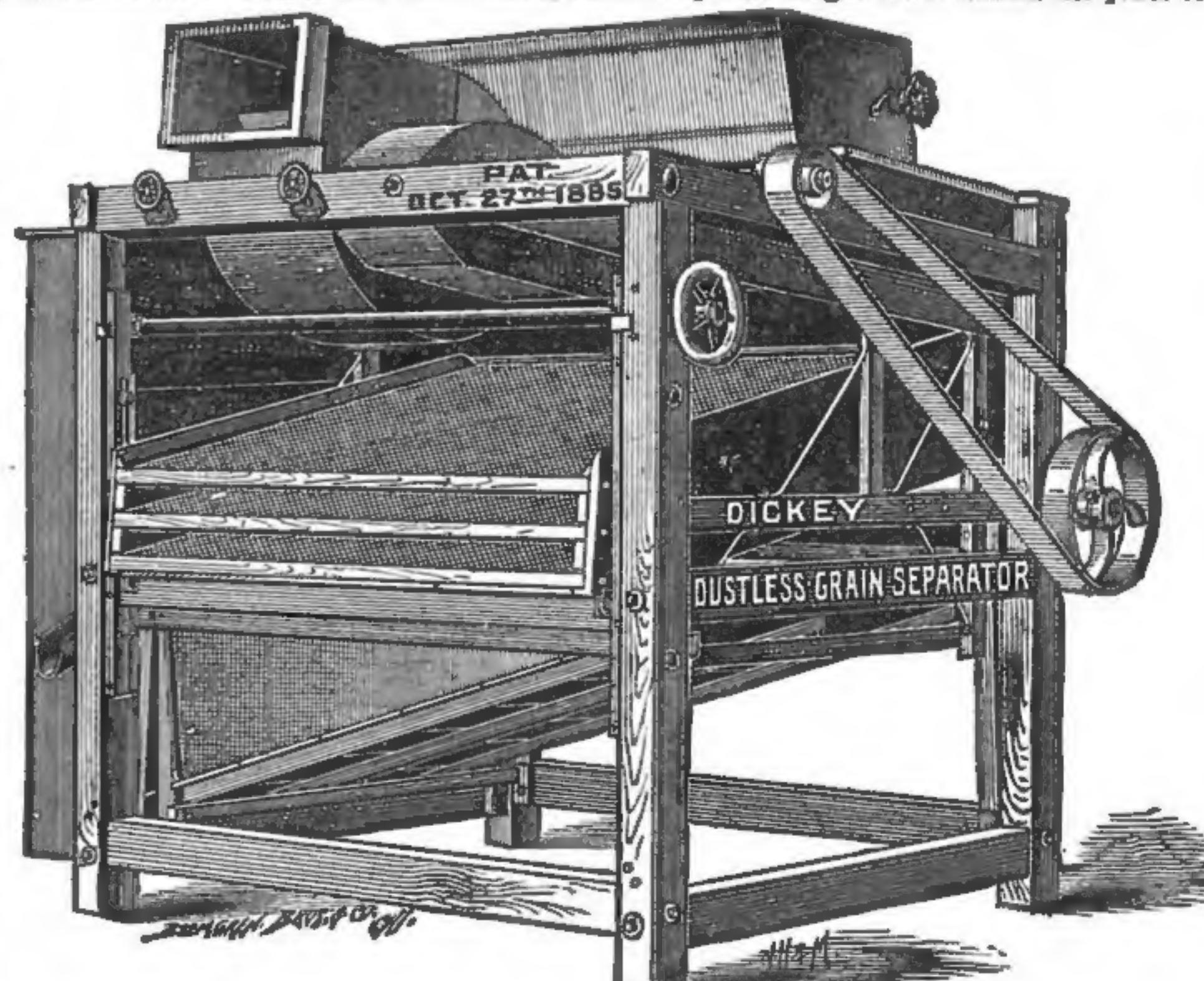
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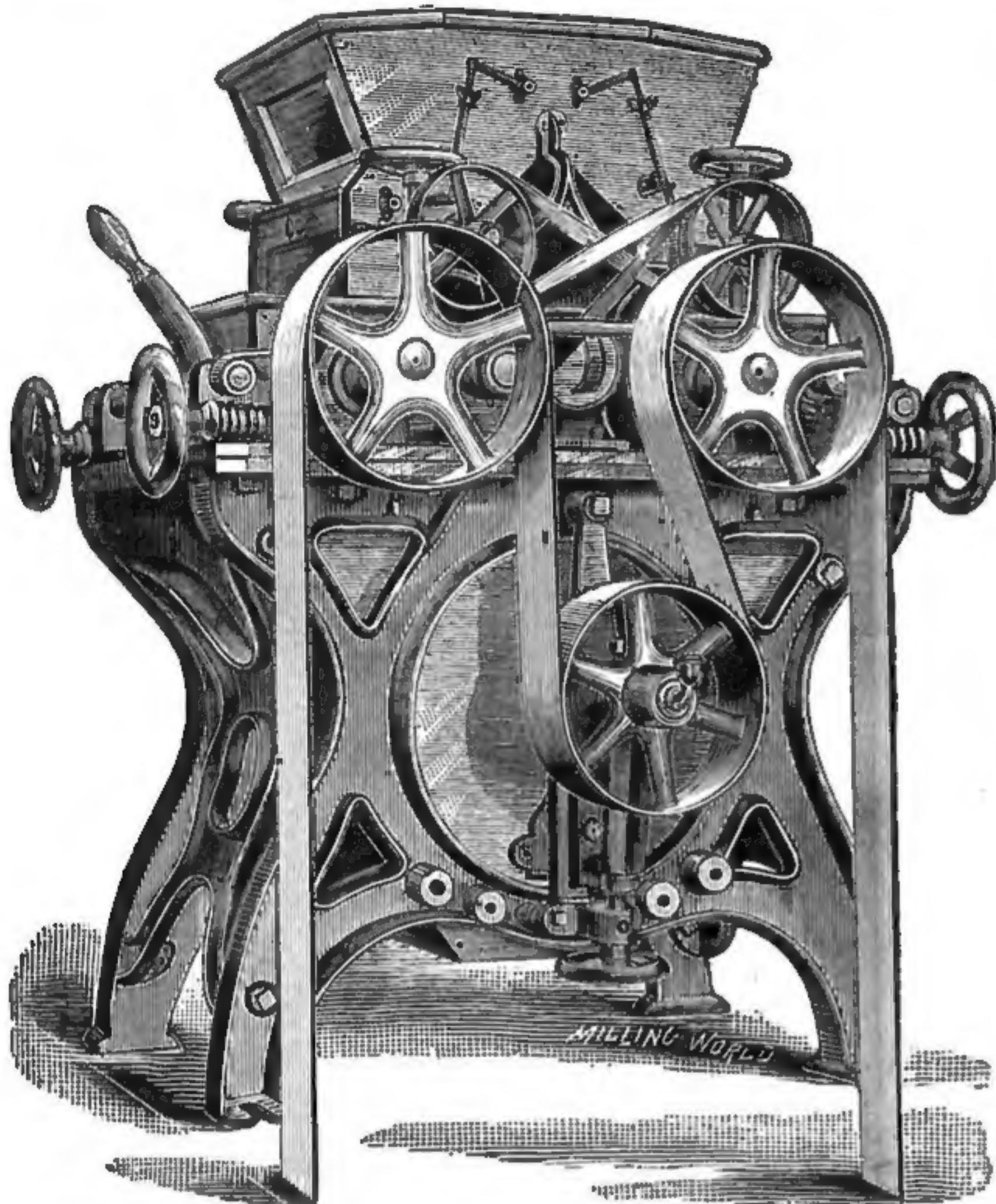
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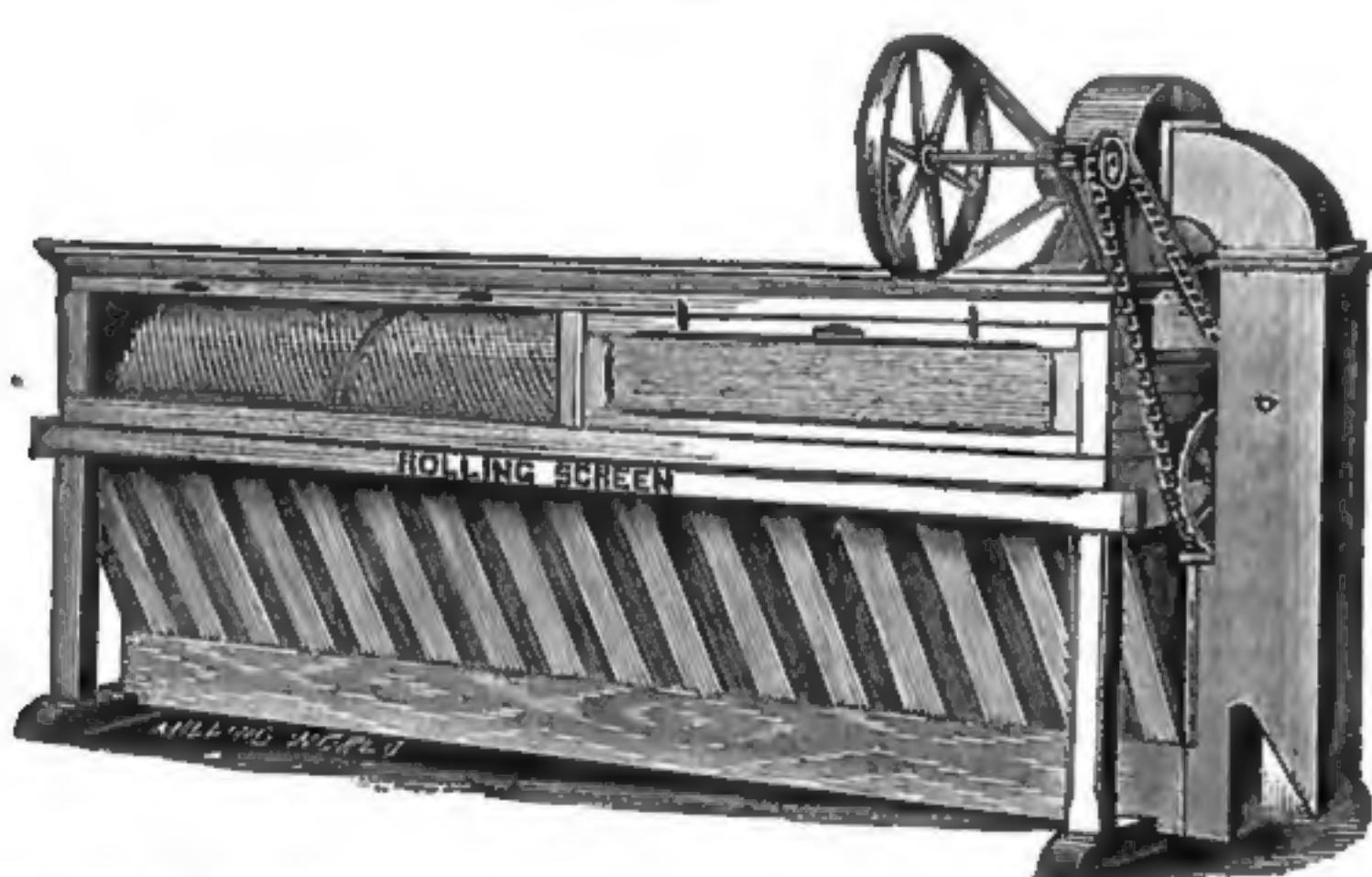
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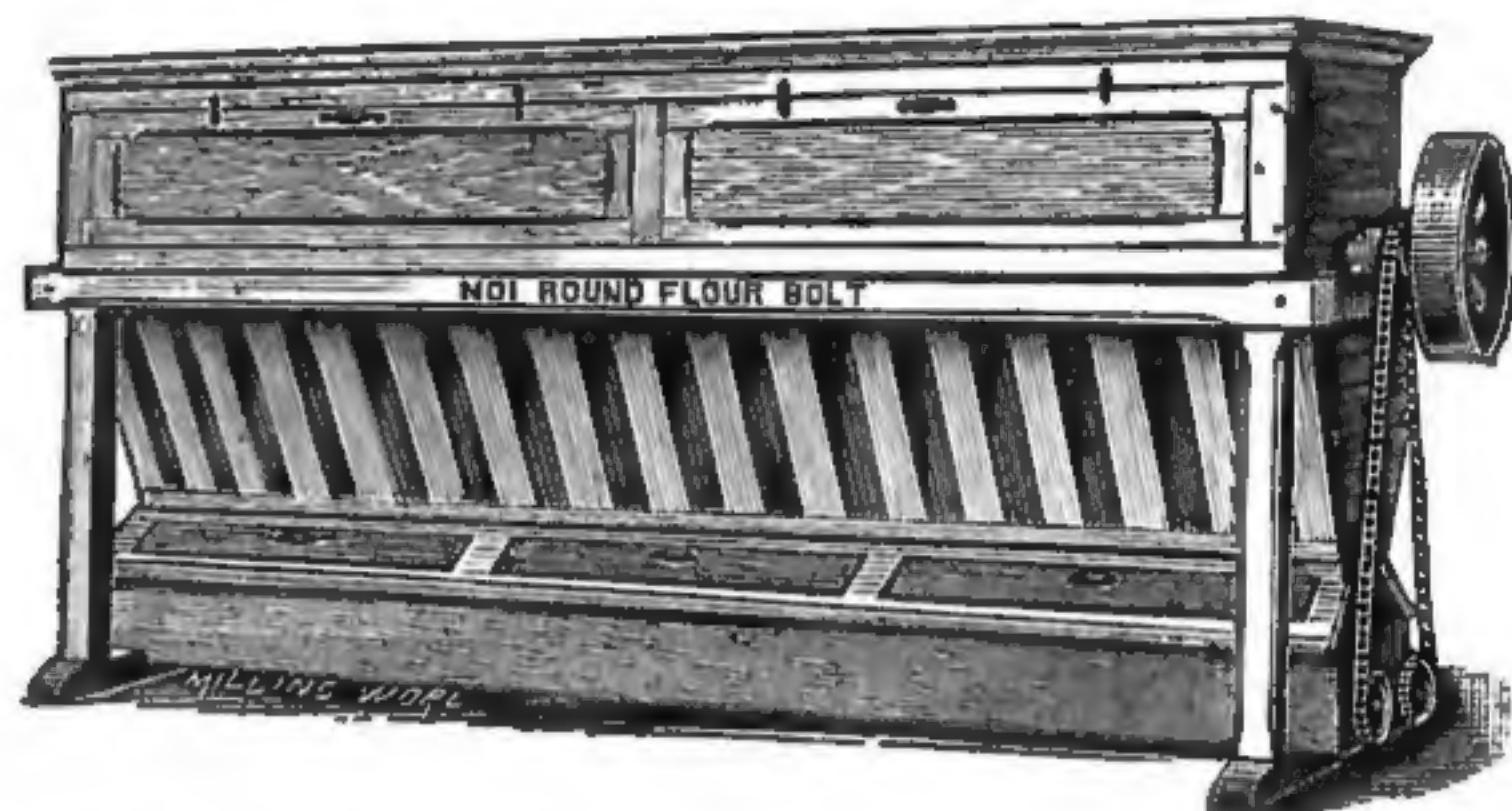
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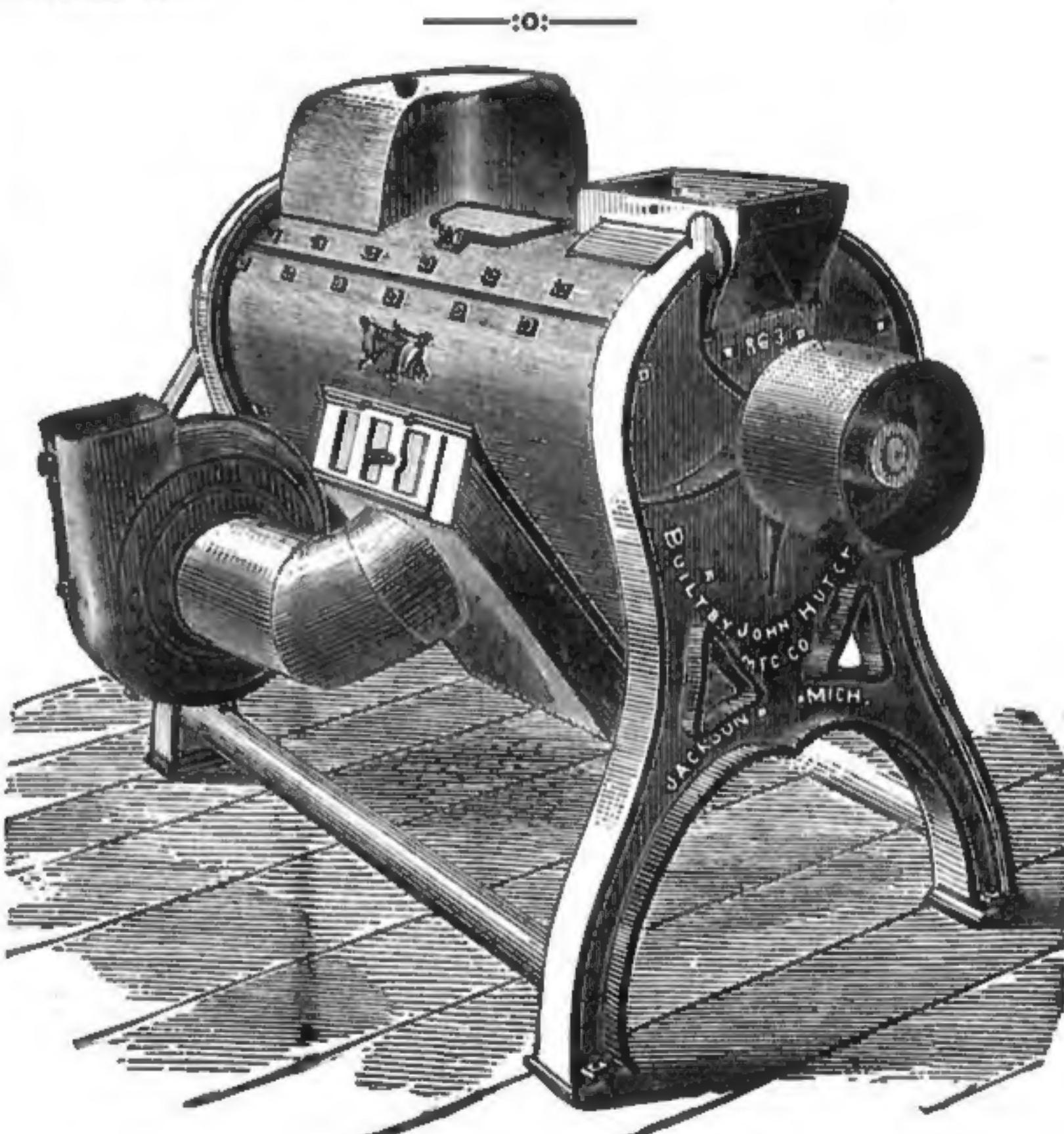


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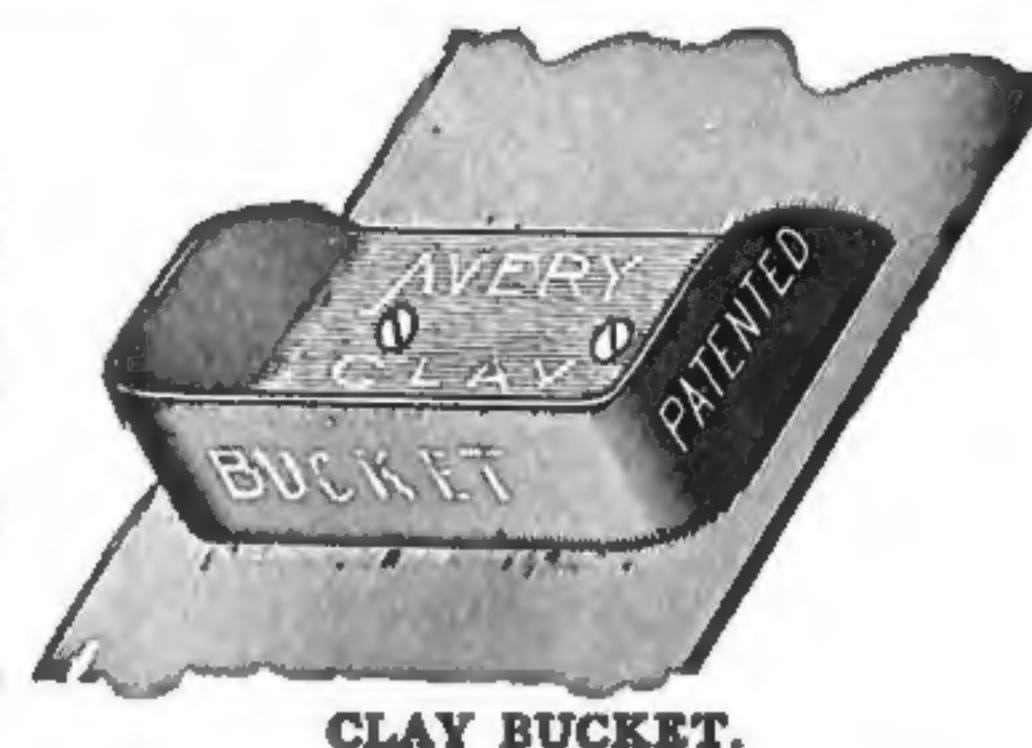
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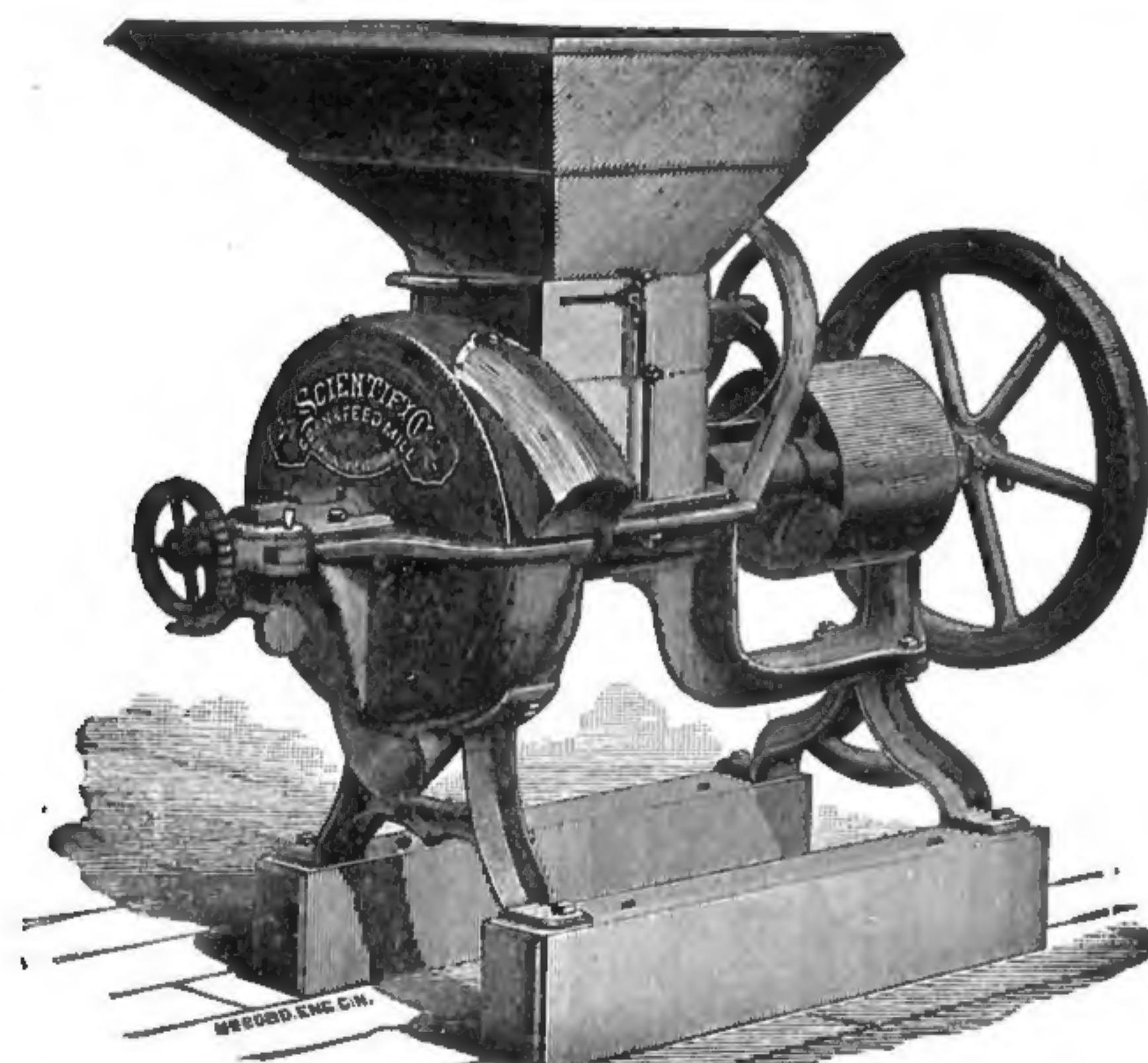
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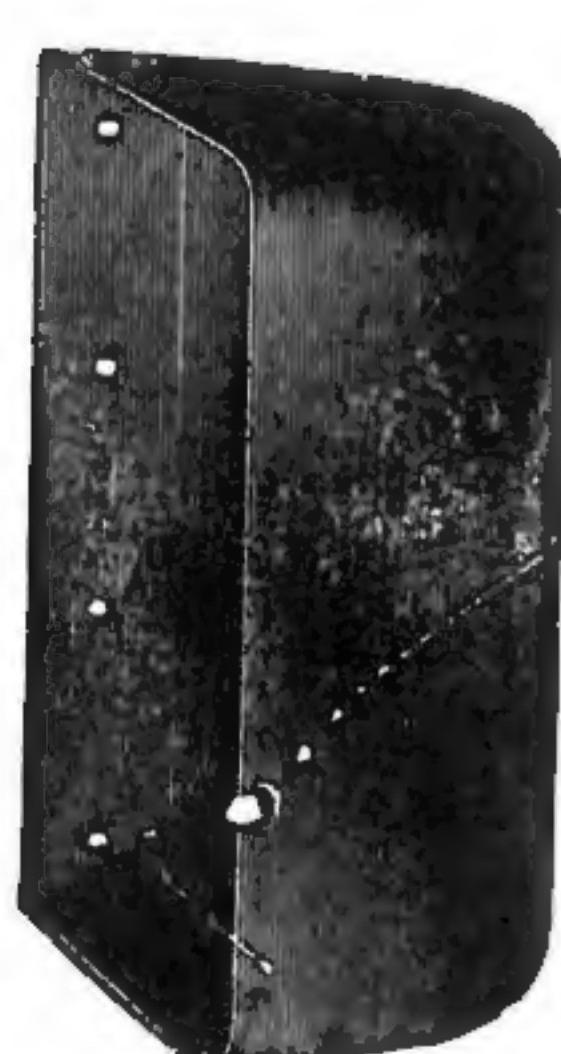
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